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Acquisition and Use of Visual/Gestural and Aural/Oral Bilingualism: A Phenomenological Study on Bilingualism and Deafness

by

David G. Mason

DISSERTATION

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

Doctor of Philosophy

Department of Educational Psychology

EDMONTON, ALBERTA
Spring, 1990

Running Head: Bilingualism and Deafness

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a dissertation entitled Visual/Gestural and Aural/Oral Bilingualism: A Phenomenological Study on Bilingualism and Deafness submitted by David G. Mason in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

Date..March 9, 1990

DEDICATION

To the people who fight ignorance and dogma

Abstract

This research starts with a review of the literature on language acquisition and bilingualism followed by a descriptive phenomenology on the experience of acquiring and using bimodal bilingualism. In this study, bimodal bilingualism refers to a visual/gestural language like American Sign Language (ASL) and an aural/oral language like English or French. Even though English or French may be written, printed, fingerspelled or signed with the incorporation of visual cues like body language and facial expressions, it is still an aural/oral language. Its syntax remains essentially intact. ASL is primarily signed and seen/perceived, and it is a visual/gestural language. How a language is used in a normal interactive social situation determines whether it is aural/oral or visual/gestural in nature. English is typically spoken and heard while ASL is signed and seen. In this study, bimodal bilingualism refers to English and ASL. English and French are considered as examples of unimodal bilingualism mainly because these are primarily spoken and heard. Although the bilingual experiences of deaf individuals are the main data subjected for analysis in this study, the bilingual experiences of hearing individuals are also included. This study involves four deaf ASL/English bilinguals, one hearing French/English bilingual and one hearing English/ASL bilingual as co-researchers to provide and validate transcriptions of their experience-based data on their acquisition and use of bilingualism. This study is based on the speculation that the experience of acquiring bimodal bilingualism by the deaf is similar to that of unimodal bilingualism of hearing individuals. Unimodal bilingualism, in this paper, refers to two

languages which are primarily spoken and heard in social interactions. English and ASL are chosen as example languages in this research simply because they are readily available within the physical proximity of myself as a researcher-author. Readers are encouraged to hypothesize that experience-based structures of bilingualism are universal among all bilinguals. For instance the lived-experiences of acquisition and use of Langue Signes du Quebecois (LSQ) and spoken French would be similar. This study also encourages awareness of visually-emphasized Deaf Culturalism. Instead of restricting the deaf students to the values of the hearing people, they should be allowed to learn and appreciate their visually-based values at home and school.

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I. Introduction, Review of Literature and Observations

A. Introduction

A considerable amount of literature on deafness exists which is primarily of two types: i) research articles, and ii) articles based on observations as personally imparted by professionals involved in the field of deafness. Much of the information from the two principal sources is available in printed English. Judging from the content of the available literature, very little descriptive research has been done on how the hearing impaired acquire and use bimodal bilingualism involving visual/gestural and aural/oral languages, as compared with the quantitative research on their performance with an aurally-based language represented in one or more forms or codes.

This study starts with a review of the literature supplemented with personal observations based on the author's experience as a deaf educator of the deaf for over twenty years. A series of interviews with four deaf and hearing co-researchers with observable English and ASL skills and one hearing co-researcher with French and English skills are the source of data for this descriptive phenomenological research. The data (protocols) collected from these sources are analyzed and the essential themes or patterns are written in formulated statements or descriptions to describe their experience of acquiring and using bimodal bilingualism.

A separate corroborative interview with the co-researchers, to validate the integrity of data, precedes the analysis of the consistency in the data from the three sources. Comparing the articulated structures obtained

through phenomenological reduction with syntheses of the review of literature and personal observations may provide a measure of cross-validation.

Possible conceptual relationships between the articulated structures and existing relevant theories may be discussed after this qualitative research has been completed.

B. Implication

I hope that the co-researchers' shared experience will be useful in developing a type of educational model that is consistent with the visually-based experience of the deaf in acquisition of a visually-based language skills. I believe that this experience will be found essential in their learning of a subsequent aural/oral language such as English.

C. "The Question"

What constitutes the experience of acquiring and using bimodal bilingualism particularly among the deaf and hard of hearing? Is this experience also common among the hearing people who acquire and use two or more languages?

D. Review of Literature

This review of the literature is intended to indicate what has been done to promote an insight into how deaf children acquire and use one or more languages. There is a need to ascertain whether or not a descriptive phenomenological methodology could provide a basis for a perspective on

deaf bilingualism that might not have been indicated in the available literature.

1. Early Childhood Experience and Language Acquisition

The Schlesinger and Meadow studies (1972) on 40 deaf and 20 hearing preschoolers showed that 75 percent of the deaf children had a language age of 28 months or less, although their mean age was 44 months. All the hearing children scored within the expected age level. The language referred to is generally English in printed form. Charrow and Fletcher (1974) showed that the deaf children of deaf parents performed better than those of hearing parents on three of the four tests of English as a Foreign Language (TOEFL). Vernon and Koh (1970) reported similar observations. Ninety percent of all deaf children have hearing parents (Meadow, 1980). The children with hearing impairment may develop specific-language experiential deficiency rather than language-specific deficiency because of their limited access to the language generally heard and spoken at home. The amount and quality of exposure to and use of the aural/oral language vary directly with the amount of and quality of experience gained with it. Fewer than 50% of speech sounds are visible for speech reading (Quigley & Paul, 1984). Rodda and Grove (1987) made the following statement: "By definition, lip-readers are gamblers. On the basis of an incomplete and fragmented perception, they use their knowledge of context, semantics, and syntax to guess at the intended meaning of message" (p. 26). This refers to older individuals with considerable language experience possibly gained at school.

Since much of the parents' language is visually indiscernible and inaccessible to the deaf child, his/her process of acquiring the aural/oral language is likely to be restricted resulting in specific-language experiential deficiency. With normal sight and manual dexterity, they are likely to spontaneously acquire and use a visually-based language; their ability to acquire and use the language suggests they are not language-specific deficient. These perspectives seem to emphasize that deaf individuals experience some difficulty in learning a school-imposed language with little consideration for their experience with their own sign language.

2. Language and Cognition Relationships

Furth (1966a p. 228) stated that "....logic, intelligent thinking does not need the support of a linguistic system; intelligence is not dependent on language, but language is dependent on the structure of intelligence." Ghislein (1955) related Einstein's thought, "The words of the language, as they are written or spoken, do not seem to play any role in my mechanism of thought" (p. 43). Piaget (1967) observed that "..... language is not enough to explain thought, because the structures that characterize thought have their roots in action and in sensorimotor mechanisms that are deeper than linguistics" (91-92). Piaget (Slobin, 1974) explained that cognitive development proceeds on its own, generally being followed by linguistic development and that intelligence is related to the child's interactions with the environment. Elliott (1981) said, "A child learning language is developing on all fronts, not just the linguistic one, and is trying to make sense out of his

linguistic input" [p.27]. One can infer that the ability to acquire and use single or multiple languages is a part of overall cognitive development; this is consistent with the human predisposition to use whatever means necessary to facilitate their learning.

Studies by Blanton, Nunnally, and Odom (1967) found that deaf subjects remember graphemically related words, words similar in visual appearance, while hearing subjects were more likely to remember phonetically related words. One can hypothesize that memory functions with either a visually or aurally-based symbol system or both.

Furth (1966, Piaget (1967) and Vygotsky (1973) investigated the relationships between cognitive processes and a language. Any future review of language and communication policy for education of deaf students should include perspectives that enhance a better and deeper understanding of such relationship.

3. Advantages of Bilingual Skills

Ben-Zeev (1977a) hypothesized that "bilinguals become aware of their languages as internally consistent systems more than do other (monolingual) children because this kind of understanding provides a way of separating their languages from each other [p.45]." This view complements that of Kirsner et al. (1980) that the two language systems of bilinguals are functionally independent; this suggests a common supra-lingual system in memory. Metalinguistic awareness and metalinguistic skills in English continue to develop into middle childhood and adulthood (Cazden, 1976 and

Flood & Salus, 1982). A similar pattern is also observed in the use of ASL monolingualism and ASL/English bilingualism among the deaf. This similarity could lead one to infer that metalinguistic awareness and cognitive strategies and skills in one language also enhance acquisition of a second language (Cummins 1980). Leopold (1961) noticed there was "a noticeable looseness of the link between the phonetic word and its meaning" (p. 358); a lingually competent individual would be able to "play or paint" with words and produce sensible and logical expressions in one or more codes. The child has to attain a certain minimum or threshold level of competence in a language before his/her cognitive growth is influenced by certain aspects of bilingualism (Cummins, 1979). Swain (1978) reported that English speaking immersion students performed better than controls on tests of English skills, even though they had received considerably less instruction in English. They performed better, probably because they spent more time with the language which was aurally based as was their first language. Peale and Lambert (1962) found that bilingual children scored better than the monolinguals on both verbal and nonverbal tests of intelligence and concluded that bilingual children have a "mental flexibility, a superiority in concept formation, and a more diversified set of mental abilities (p. 20)". These children apparently had the advantage of using the same speaking and hearing organs they had used with their first language. Bain and Yu (1987) studies in different settings have confirmed these general conclusions.

There is enough evidence to show that advantages of being a bilingual should be incorporated into developing a bilingual education model. The

ability of a bilingual to do as well as a monolingual in academic pursuits implies that learning a second language, under favorable conditions, does not necessarily interfere with cognitive processes.

4. Possible Relationships Between the First and Second Languages

Cundy (1988) completed a phenomenological study on the relationships between deaf students and deaf teachers and made the following statement: They found that deaf teachers' natural use of sign language was their strongest asset; their fluent use of American Sign Language enabled them to be competent in making subject contents easier to learn" (p.58). This observation implies that deaf teachers with two established languages are in a position to support the deaf children in two ways. The teachers confirm the children's language while showing them how to use English efficiently.

Bellugi and Klima (1972) reported that deaf children learning sign language were systematic, regular, and productive in their language, like hearing children. The ability of these deaf children to learn and use English as a second langauge may be based on their successful acquisition and use of a first functional language (Cummins, 1980; Flood & Salus, 1982). It seems that no research has been done on the effects of their spontaneously acquired language (the first language or L1) on their ability to learn English as a second language (L2).

It is not unusual for English-speaking students to become able to listen, read, speak and write French with confidence after having completed their courses or their French-immersion program (Dolson, 1985). With this

observation, one may hypothesize that the individuals' first-language competence facilitates their acquisition of the skills of the subsequent language. Piaget's concept of accommodation and assimilation may be introduced to propose that existing schemata for language facilitates assimilation of a subsequent language. A functional here-and-now language would be the basis of accommodating a language schemata; any subsequent language would be assimilated into the existing schemata. The developmental interdependence model proposes that the development of skills in a second language is a function of skills already established in the first language (Skutnable-Kangas & Toukoman, cited in Cummins, 1978). This model appears to be an elaboration on Piaget's concept (Piaget, 1967). Piagetian theory would suggest that the individuals who use the same communication schema would acquire a new language more through an assimilation process, rather than an accommodation process. He would agree that the deaf individual's learning basic speech skills must create or modify a schema for speaking and/or hearing a new language. The deaf individuals with well-established signing skills and sign language would need to create a schema for speaking and/or skills and would assimilate a new language into their existing language schema. There are other deaf students who start school with rudimentary communication skills and a non-standard language. Hypothetically, these students need to develop schemata for communication skills and schemata for acquiring or learning a social language. They might have to face at least twice as much school work as hearing counterparts do. (Note: communication and language are not

synonymous.)

The ability of an individual with adequate communication and language skills to acquire a second language may have a basis in social processes. How an individual acquires and uses one or more languages through social interaction should be investigated more seriously.

5. Parent-Child Dyads

One can hypothesize that the differences in the deaf parents-deaf child and the hearing parent-hearing child dyads are the important determining factors on the difference between these deaf children's academic performance later in life. The superior language skills enjoyed by deaf adolescents and adults may be attributable to their childhood relationships with deaf parents and siblings, particularly in their first six years to life. Vernon & Koh (1970) found that deaf children of deaf parents did well with English skills (speech skills, included) in their later school years even though many of the families used a sign language which was syntactically different from English. Many of these children enter school with a sophisticated sign language and start to learn English at the age of five or six years; they seem to advance through an English dominated educational system. Cummins (1980) would explain that basic interpersonal communicate skills (BICS) are acquired with the first language by all children; cognitive/academic linguistic proficiency (CALP) develops with literacy skills in either first or second language. BICS refers to spontaneously acquired/developed communicative skills in an uncontrolled environment such as the home. The children who

have clear access to the family communication network and use the same family language are expected to have adequate BICS. This includes the families that use ASL. These children enter school and are required to develop CALPs with a different language. Their success at school may be attributable to the applicability of their BICS at school. It seems that the different home/school languages do not hamper their progress at school probably because of their well-established BICS. Hypothetically, their BICS permit them to enjoy progressive CALPS.

Traditional monolingual education of the deaf tends to emphasize teaching of a language which is also the language of hearing family members and hearing community members. A better understanding of how deaf children communicate with their peers or siblings should be a basis for an insight into how deaf students learn curricular lessons.

6. Effects of Pre-school Language Experience on Academic Performance

There are other deaf children entering schools with linguistically impoverished backgrounds (Kannapell, 1985); they must acquire basic communicative skills and develop cognitive/academic linguistic proficiency at about the same time, often at the age of six years. These children are likely to be educationally delayed as well. Spontaneous use of a functional language (BICS) is believed to be essential for self-esteem and a sense of belonging as well as general knowledge. Functional language is referred to as a "here-and-now vehicular" language the child can use to meet his/her

need to grow and interact with others. The children with unreliable hearing can and do develop well with a sign language of the deaf, a highly sophisticated functional language. The children, with a solid language background, have been observed teaching sign language to the linguistically underdeveloped even in oral English-only educational programs. This observation is consistent with that of Kluwin (1982) who wrote, "Traditionally, there have been stories of teachers in oral English programs using signs to communicate with deaf children in spite of school policy" (p.16). Children start their first year at school with experiences they have previously gained at home and in the neighborhood. Hearing children typically start schooling with an established language. Deaf counterparts may start with either an established language or a form of sibling or familial communication system. Educators typically choose to encourage or discourage further development of the language or system.

7. Functional Language, a Basis for Language Proficiency/Competency

Battacchi & Montanini Manfredi (1985) found that adult deaf, fluent in both spoken and signed languages, adopt the same strategies and achieve the same results as hearing controls when they have to recall the spatial order of written verbal items whose temporal order of presentation is incongruent with their spatial order. Montanni Manfredi and Fruggeri (1983) reported that two congenitally deaf adults, orally trained but competent in sign language, told stories that were more elaborate and articulated in content when the stories were told in sign language than in spoken language.

Competency in the use of a functional language seems to make codeswitching between two languages possible and easy. One of the main principles of bimodal bilingualism is to give the individuals freedom to use one language or another, whatever is needed to support their cognitive and affective developments. This may be summarized to suggest that a language has to be meaningful and relevant to the individual in order to be useful.

8. Recognition of Bilingualism as Educationally Viable

Balanced bilinguals (defined in Appendix B) use either ASL or English depending on the language experience and competency of others (Kannapell, 1985). Unless the individuals become bilingually balanced, they may remain ASL-dominant bilinguals or even semi-linguals (also defined in Appendix B). On bilingual/bimodal proficiency, Luetke-Stahlman (1986) wrote "If a teacher simply ignores the hearing-impaired child's minority language status and does not strive to build a strong first language on which to build second-language (i.e., English) literacy skills, problems with academic/cognitive tasks will result" (p.220). If English structure is not the internalized language structure for deaf children, then what constitutes the basis for their communicative capacity? If the deaf use sign language freely among themselves, it has to be functionally equivalent to the English of the hearing counterparts. If English and ASL are similar in function, the deaf can learn both of them and become bilingual. Quigley & Paul (1984) pointed out that a number of studies indicate that the structure of American Sign Language is the functional structure for some deaf persons while some hybrid of ASL and

English is for others. There are questions: 1. Should deaf children learn ASL exclusively until it is mastered as their common first language? 2. Should deaf children be bilingual from birth? There are related questions as well: If the deaf child in a hearing family should learn ASL as the first language, should the hearing family members become bilinguals with ASL and English? Should the deaf child accept the responsibility of learning the family's aurally-based language even with his/her defective hearing? With their normal eyesight and manual and facial coordination, should the hearing individuals learn ASL? (They would not need to adjust as much as the deaf child would with speech skill learning.) Any act of restricting deaf children to formal learning of one school-promoted language is in need of justification, particularly when hearing children are often not precluded from taking a second language.

9. The Suppression of ASL

Quigley & Paul (1984) stated, "ASL has often been repressed, or at least discouraged, in the educational system and thus has not been free to flower and evolve as have spoken languages" (p.8) Perspectives on how the deaf should learn English preclude perspectives on how they spontaneously acquire a sign language as well as how they could become bilingually experienced and competent. Kannapell (1985) said, "... the educators of the deaf believe that the language of deaf people, ASL, interferes with or prevents deaf children from hearing English" (p. 52). Cummins (1979) and Krashen (1982) pointed out that the child's first language could be used to

build second-language literacy skills needed for success with academic/cognitive tasks. Erickson (1985) wrote, "The suppression of languages other than English also has a history" (p.1). Suppression of a language to hasten enculturation is one thing; suppression (usually unintentional) of the ability to acquire language and communicative competency/proficiency is another.

Well-meaning educators attempt to involve deaf children as integral members of their culture through teaching the children the former's language. They may not realize that the deaf children's visually-based language could be efficient as a basis for giving them a sense of becoming a part of a culture.

10. Existing Language Learning Programs

The following language approaches in education of the hearing impaired, as listed and commented upon by Clarke & Stewart (1986) are believed to be the principal programs used in different educational programs over different time periods. 1. Language Stories and Drills (Croker, Jones, and Pratt, 1920); 2. Fitzgerald Key (Fitzgerald, 1929); 3. Natural Approach (Groht, 1958); 4. Patterning Approach (d'Arc, 1958); 5. Programmed Instruction Approach such as Project Life in the 1960's; 6. Behavior Modification; 7. Linguistically Based Approaches (Kretschmer and Kretschmer, 1978). Clarke (1983) noted that the effectiveness of each program is limited. Clarke and Stewart (1986) stated that the education of the hearing impaired has a long history of mediocre success and further

pointed out that unless a hearing-impaired child sees language within the context of dialogue or communication, it is doubtful whether he or she will use it functionally outside the classroom. The implication is that educators do not take into consideration the applicability of their perception of the students' need to learn the school values to the children's real-life needs inside and outside the classroom. Are the values (eg., school-determined language and communication methods) imposed on the deaf children really superior to the values the children perceive through their real-life experiences? Is English really that superior to the children's formal sign language like ASL or even their "rudimentary peer language". (A typical example of rudimentary peer language develops through interactions between deaf and hearing siblings who do not have access to a formal sign language.)

A number of studies of school-age deaf children's language have focused on the children's knowledge of English syntax and semantics (Geers and Moog, 1978). Results from these studies show that school-age deaf children are mildly to profoundly delayed or deviant in language development. Gardner & Zonfass (1983) pointed out that many hearing-impaired children are still language-deficient when judged by a reasonable standard of literacy in reading, writing, and oral English and that there is little research available that indicates the advantage of one language program over others currently being used with the hearing impaired. Presently, we have little information on these children's pragmatic development - on how they use their language to communicate (Hughes & James, 1985). As a general rule, deaf students

in educational programs are being measured against the standards of English, an oral/aural language with very little consideration for their success with a visual/gestural language. Their tendency to communicate among themselves indicate that they are as comfortable and confident with their visually-based language as normally-hearing persons are with their aural/oral language. Teachers complained that the students, generally described as "non-verbal and inarticulate," never stopped talking--signing--in their own language (Rodda and Grove, 1987).

This implies that educators of deaf children function as oppressors rather than as supporters of children. They do not seem to understand that the children's communication among themselves constitutes as a basis for language acquisition and use. By suppressing this basis, the educators, in effect, interfere with their own teaching objective--to teach the children a language.

11. Impeding Factors

Professionals (the majority of them being not deaf themselves) are generally aurally-based language experienced. This may be inferred to suggest that they are not expected to be as experienced as the deaf in the use of the visual channels for language and communication purposes. Yet they are the ones to develop and implement language learning policies that determine how the deaf should learn a language. Because of their relative lack of experience, they may not realize that it is possible for the deaf to learn English after having become proficient in ASL. Because of such

policies many deaf children are placed in educational programs where they must learn English and use a new language as a means to obtain education. This is a submersion program in which the children's first language is being oppressed through emphasis on the importance of a second language as a target language (Dolson, 1985). Deaf children who are discouraged from using a sign language to share their visually-based experience and required to learn a school-imposed language are considered to be in a submersion program.

12. Possible Theoretical Explanation for Bilingual Competence

Vygotsky, as translated and edited by Hanfmann and Vakar, (1973) stressed:

> Inner speech is not the interior aspect of external speech - it is a function in itself. It still remains speech, i.e., thought connected with words. But while in external speech thought is embodied in words, in inner speech words die as they bring forth thought. Inner speech is to a large extent thinking in pure meanings. It is a dynamic, shifting, unstable thing, fluttering between word and thought, the two more or less stable, more or less firmly delineated components of verbal thought. Its true nature and place can be understood only after examining the next plane of verbal thought, the one still more inward than inner speech (p. 149).

Although Vygotsky seemed to show relationships between thought and word, he hinted that there was a cognitive structure that is deeper than the

level of word-thought structure. In layperson's terms, the external speech turns thoughts into words and the egocentric speech turns into inward thought. This implies that the words undergo transformation into some form of "cognitive units" which are then transformed into words of the same or a different language. This interpretation would adequately explain the apparent naturalness evident in translating between languages including ASL and English. The phenomenon of bilingual flexibility and versatility may be attributable to the reality of this deep cognitive-based structure. Furth (1966) attempted to show that thinking occurs without language. Quigley and Paul (1984) explained that basic perceptual and cognitive development precedes language and provides the basis or underpinning for linguistic development" (p.31). Quigley and Paul also described Piaget's view:

> A symbolic function exists which is broader than language and encompasses both the system of verbal signs and that of symbols in the strict sense...it is permissible to conclude that thought precedes language...language is not enough to explain thought, because the structures that characterize thought have their roots in action and in sensorimotor mechanisms that are deeper than linguistics (p.31).

Piaget (cited in Quigley & Paul, 1984) explained that interactions between accommodation and assimilation further develop schemes as the child's representations of experience. These perspectives may suggest that the ability of the deaf to become bimodally bilingual with ASL and English can be explained better with the cognitive dominant hypothesis than the language dominant hypothesis like the Whorfian hypothesis (Quigley & Paul,

1984).

The "Affective Filter Hypothesis" (Krashen, 1982) proposes that anxiety, motivation and self-esteem are important factors in affecting second language acquisition. How a language is naturally acquired is therefore more important to language users than how a language is formally taught in the classroom. A language becomes meaningful when it is in use in socially interactive situations. A formally taught language becomes meaningful only when the persons can use it with others or think with it. No language exists independent of communication.

The Threshold Hypothesis (cited in Cummins, 1977) suggests that adequate initial development of L1 is indispensable to development of L2. With this hypothesis, Cummins pointed out that acquisition of a functional first language is essential for acquisition of a second language. This hypothesis implies that confident ASL users should not experience difficulty in acquiring English language as a subsequent language in a bilingual school. The developmental interdependence theory (Skutnable-Kangas & Toukoman, cited in Cummins, 1978) explains that an inadequate first language would impede the acquisition of a second language. Quigley & Paul (1984) stressed that "a highly developed L1 (prior to the introduction of L2) will contribute to a high level of development of competence in L2 at no cost of L1 competence" (p.169). Quigley & Paul (1984) added that "the continued development of L1 is instrumental for the development of high level of L2 skills" (p.172). L1 generally refers to the naturally acquired first language and L2, a subsequent language typically learned at school. These theories simply confirm or

elaborate on the reality of bilingual experience among many deaf people and support the duality of ASL and English in bimodal bilingualism. My descriptive phenomenological research may elaborate on the theories.

In the additive/subtractive theory, Lambert (1974; 1975) explained that the second language poses no threat to the first language in an additive environment but it does in a subtractive environment. Lambert (1974) and Carey (1987) proposed that the degree of bilinguality among minority groups such as francophones (French-speaking individuals) could be explained with the additive/subtractive theory. He noted that a high rate of assimilation into English with a low ethnolinguistic vitality might lead to a low level of bilinguality among the francophones. They would have a reduced mastery of either French or English. Likewise, this subtractive theory would apply where deaf children's sign language--and visually-based lifeworld experiences--are de-emphasized. Instead they are required to learn English which is essentially an aural/orally-based language as well as the cultural values of hearing people. Deaf children are likely to suffer a language development delay at a school where their functional method of communication acquired through interaction with peers is discouraged. This would be a good example for the subtractive theory.

Lambert & Tucker (1972) proposed an interdependence theory. Proponents of this theory would point out that ability to use two languages positively influence the development of some cognitive processes.

Kluwin's code-switching theory (1982) supports an assumption that humans are predisposed to be flexible and adaptable with language and

communication methods. In essence, he described how the competent language user adjusts to the type of level of language competence of the other-language users. In a way, the interdependence theory and the code-switching theory are related since both imply that humans are basically lingually flexible and versatile.

Calami (1987) reported through the Southam Literacy Survey that bilingual Canadians are only two-thirds as likely to be functionally illiterate as Canadians generally - 16 percent as opposed to the national average of 24 percent. Natural science researchers may not be sure if bilinguals involved in the survey were properly selected for this study. These researchers may wish to investigate and establish correlations between bilingualism and literacy (or illiteracy) rate. To me, as a human science researcher, the Calami report may point out that bilingualism enhances, rather than interferes with, acquisition of literacy skills. I have been observing many instances of deaf children and adults enjoying their successes in reading printed materials and discussing them in ASL. I am fully prepared to formulate a hypothesis that a visual/gestural language of the deaf like ASL and an aural/oral language of the hearing like English are equally sophisticated as functional languages.

Vernon and Koh (1970) showed that average intelligence of deaf children was similar to that of hearing children. This may be construed to suggest that bilingual theories for hearing children could also be used to explain deaf ASL/English bilingualism.

13. Promising Model to Consider

Stewart and Hollifield (1989) wrote:

> Bilingual education for deaf children who use sign is a fairly new concept and one that warrants serious consideration. The use of both Americal Sign Language (ASL) and English in the school setting is a recognition of the impact that both languages have on the lives of deaf individuals. An education that stresses the functional and educational aspects of both ASL and English can help students learn to interact more effectively and identify more strongly with both deaf and hearing people (pp.)

Akamatsu and Stewart (1987) have developed a model proposal that deserves serious consideration. The proposed model for training teachers of the deaf is based on the principle of recognizing and taking advantage of the strength of the inherent ASL or ASL-like characteristics in the deaf students' language. Hearing teachers would require training in order to become bilingually competent with ASL and English. "Bilingual education must avoid the type of initiation into the field that occurred with MCE systems in the seventies" (p. 5) MCE is an acronym for manually coded English. MCE systems represent educators' efforts to make compromises between ASL and English. MCE incorporates many of the ASL signs but de-emphasizes the ASL syntax. The reader is reminded that MCE is <u>not</u> a language but one of the codes of English language that is made more visually accessible through incorporation of invented or ASL signs. This implies that the combination of MCE and English does not necessarily mean that the deaf students have

bilingual education. Bilingual education involves two different languages such as LSQ and French, ASL and English or even ASL and LSQ. The two different languages must be recognized and respected by the educators and community members in order for the students to enjoy the benefits of bilingual education.

Johnson, Liddell and Erting (1989) offered a model program for education of deaf children based on the following principles:

1. Deaf children will learn if given access to the things we want them to learn.
2. The first language of deaf children should be a natural sign language (ASL).
3. The acquisition of a natural sign language should begin as early as possible in order to take advantage of critical period effects.
4. The best models for natural sign language acquisition, the development of a social identity, and the enhancement of self-esteem for deaf children are deaf signers who use the language proficiently.
5. The natural sign language acquired by a deaf child provides the best access to educational content.
6. Sign Language and spoken language are not the same and must be kept separate both in use and in the curriculum.
7. The learning of a spoken language (English) for a deaf person is a process of learning a second language through literacy (reading and writing).
8. Speech should not be employed as the primary vehicle for the

learning of a spoken language for deaf children.

9. The development of speech-related skills must be accomplished through a program that has available a variety of approaches, each designed for a specific combination of etiology and severity of hearing loss.

10. Deaf children are not seen as "defective models" of normally hearing children.

11. We concur with one of the observations of the report of the Commission on Education of the Deaf, that "there is nothing wrong with being deaf" (1988:vi).

12. "The Least Restrictive Environment" for deaf children is one in which they may acquire a natural sign language and through that language achieve access to a spoken language and the content of the school curriculum (pp. 15-18).

The twelve principles encourage hearing people to respect deaf people as humans and learn--from them--how they function in an oppressive society.

The principles seem to be consistent with a full transitional bilingual program (Dolson, 1985). In this program hearing students would enjoy instruction in their own language for their first four to six years of schooling. By the sixth year, the students would be studying subject matter more in a second language than in their first language. These students would become confident with their new language while maintaining their first language skills. Proponents of this bilingual model would permit deaf students to use their sign language, ASL, to study all subject matter in their pre-high school years

and gradually incorporate English as a second language in their junior and senior high school program. In this way they would not lose valuable time in learning regular subjects like mathematics, social studies, and others. This bilingual model seems more promising than a monolingual immersion program (Dolson, 1985) which would mean that deaf students study subject matter and English as well as an oral method of communication; this has been a traditional model--in deaf education--and numerous studies show that, as a result, deaf students have had a low academic achievement pattern (Vernon & Koh, 1970; Johnson, Liddell, & Erting, 1989).

The above perspectives de-emphasize what deaf children do not have and need to be taught and emphasize how they can develop with what they have. This way, deaf children are perceived as human beings rather than as "victims of hearing loss".

14. Reflection on the Review of Literature

From a review of the literature, one can infer that the person who is comfortable with his/her first language may have a better chance to acquire and use a second language (Dolson, 1985). This review shows that very little research has been done on deaf individuals' experience of acquiring and using bimodal bilingualism like ASL and English. More specifically, there seems to be a lack of research on the quality of deaf individuals' acquisition of a sign language through socialization as compared with their learning of a school-promoted language like English. This review of the literature concludes that bilingualism among the deaf is little understood. Rather than

assessing or measuring the performance end-product, the intent of this study is to describe the experience of acquiring and using ASL-English bilingualism. The experience data must be obtained from the individuals (co-researchers) and analyzed; a human science research methodology is preferred for the intent of this study. This permits the researcher to deal with experience-based data voluntarily told by the individuals themselves.

E. Observations

The following observations represent my foreunderstanding that ASL and English are similar in function and that the experience of acquiring and using either language can be described as similar in structure. This foreunderstanding will be bracketed before the start of this descriptive phenomenological research into the experience of acquiring and using ASL/English bilingualism. Bracketing is an attempt to maintain the fidelity to the phenomenon as it is lived (Polkinghorne, 1986); the goal is to collect and analyze the experiential data as given by the bilingually experienced individuals. The sign language of the deaf (ASL, CSL, LSQ, MSL, BSL, DSL and others) and spoken languages (English, French, German and others) have been observed by myself and my acquaintances as equally sophisticated in satisfying needs of interaction between human beings. In order to confirm this observation, I had asked volunteers to read and translate a story through two languages (ASL and English) with an assumption that the story content would remain essentially intact through the translation (see Appendix A). Observation Two represents my belief that the

prevailing negative attitude toward ASL/English bilingualism in educational systems in largely responsible for the difficulty the deaf have in learning English.

1. Observation One.

The content of an ordinary newspaper story (Appendix A) was well preserved through three different types of translations by bilingually and educationally experienced deaf and hearing adults. The three types of translations involved: 1) printed English through ASL to written English, 2) printed English through rarely used idiosyncratic gestural language to written English, and 3) printed English through spoken English to written English. The original story in printed English compared well with the story in written English in each type of translation. The ability of the deaf to translate the printed-English content through ASL which permitted a second deaf person to perceive it and rewrite it in English suggested that ASL is as lingually sophisticated as English.

2. Observation Two

The sign language of the Deaf (ASL) has never been formally recognized by educators as educationally viable in facilitating the acquisition of English as a second language (Mason and Carver, 1986). Deaf children in oral-only school programs are trained to speak, lipread, hear, write. They are discouraged from acquiring signing skills; however, many of them eventually acquire signing skills as teenagers or adults. This is inferred to suggest that sign language supports cognitive and affective developments among deaf individuals.

F. Critique on the Existing Knowledge

There is very little consideration by educators of how bilingualism is naturally acquired and used by the deaf. Bilingual skills are not formally taught to the deaf and yet children become bilingually experienced with English and ASL like their hearing counterparts with English and French or any language. Educators like Goldberg, Ford and Silverman (1984) seem to show more interest in how deaf students perform with English skills as compared with their interest in how well the students perform with their existing language--a sign language. Appendix E lists a number of common errors deaf students make in their attempts to express themselves in English.

This review of the literature suggests that a considerable number of studies have been done on how the children perform with one or the other language rather than how they acquire and use bilingualism. Carver (1989) identified at least four major areas in the field of deafness that need attention: 1. The study of American Sign Language, 2. The study of deaf professionals and educators, 3. Research on habilitative approaches which enhance the use of the visual channel and other sensory channels, and 4. Research on the presence of genuine classroom dialogue (p.120). As pointed out elsewhere in this dissertation, bilingualism is not necessarily limited to the linguistics of two or more languages. It encompasses all aspects of the individual's existence within a given environment in which she/he has an opportunity to acquire and use more than one language.

G. Intent of the Study

In reflecting on the combination of the review of the literature and the observations, one can suspect that the process of becoming bilingually experienced and proficient or competent involves much more than observable and measurable "mechanical or conscious learning and retaining" of words or signs according to certain syntactical guidelines.

Since a symbol system is an essential part of the dynamic "here-and-now" interactions with the environment, it is considered to be an observable but little-understood phenomenon. The ability of visually-orientated deaf people to use an aurally-based language either as a first or second language is definitely little understood. The phenomenon has to be described before it may be subjected to natural science research. Insight into this phenomenon is essential for understanding bimodal bilingualism among the deaf as well as bi- and multilingualism among other people.

H. The Reformulated Questions

The reformulated questions are: What is the experience of acquiring and using bilingualism among the deaf? What is the experience of switching between the visual/gestural and aural/oral languages like? Would the experience in acquisition and use of bimodal bilingualism by the deaf be similar to that of bilingual hearing people?

II. Research Methodology

A. A Need to Understand the Phenomenon of Bilingualism

Some natural science researchers have tried to use scientific methods of biological and physical sciences to study certain aspects of human phenomena. Researchers' endeavours have been producing large quantities of information regarding observed human behavior patterns. There are many ways to attempt to satisfy the insatiable human curiosity through one or other methodologies of Natural Science Research and Human Science Research.

The phenomenon of acquisition and use of ASL/English bilingualism is one of the observed but little understood human phenomena. Bilingual skills are not necessarily taught; they can be spontaneously or naturally acquired through knowledge and use of two different languages within a given appropriate social context. Bilinguals simply switch between languages without being aware of the switching process itself, perhaps in the same way that unilinguals switch between colloquial and formal registers. Bilingualism is not an instantaneously acquired phenomenon; therefore its historical and developmental perspectives must be considered. The context in which bilingualism encompasses the co-constitutionality of the language and the culture which may be difficult to study scientifically. It has so many possible variables that a research methodology must be flexible enough to include them but systematic enough to allow reliable data collection and analysis. Exploration of the unknown realms of the phenomenon must not be limited by preconceptualized hypotheses and procedural restrictions. The nature of

human language is not limited to any one area of epistemology.

B. Qualitative and Quantitative Research Methodologies

It helps to become familiar with at least one perspective of differences between qualitative and quantitative research methodologies before one of them is determined as the most appropriate one for studying a phenomenon. Stainback and Stainback (1984) offered the following criteria for quantitative research methodologies. Quantitative researchers:

1. attempt to gain understanding or facts from the outsider's perspective;
2. focus on the facts and causes of behavior and believe that these facts do not change;
3. view things in a particularistic manner with a tendency to identify and isolate specific variables for study;
4. use research procedures that are highly structured and often verification oriented;
5. focus on objective data, data existing apart from the feelings or thoughts of people and typically expressed in numerical notations;
6. usually collect data under controlled conditions in order to rule out the possibility of variables other than the one being investigated could account for behavior change or a functional relationship among variables; and
7. desire both reliable and valid results.

As an attempt to conceptualize how natural science researchers would study the phenomenon of bilingualism, the following assumptions may be realistic. Natural science researchers would probably wish to identify factors that may be accountable for the phenomenon of bilingualism. They would be interested in relationships between the individual's attributes and the likelihood of his/her becoming a bilingual. With enough knowledge of the attributes they may want to be able to predict or even control the quality and quantity of bilingualism.

Natural science researchers deal with a limited number of variable aspects of bilingualism at a time. They may eventually find enough evidence to show that certain aspects of bilingualism have effects upon other aspects which account for the phenomenon of bilingualism. They may support, reject or modify existing bilingual theories. They may discover techniques that can be used to stimulate or retard learning of certain skills of a certain language and measure the efficiency of the techniques. Other natural science researchers may wish to do a comparative study on the bilingualism of the deaf and that of the hearing. They may measure how much information can be preserved through language translations. They may measure the extent of bilinguality; for instance they may estimate how much more English the deaf have as compared with how much ASL they have. There are so many possible hypothetical constructs to encourage quantitative research pursuits.

Stainback and Stainback (1984) made the following statements in order to distinguish the qualitative research paradigm from the quantitative research

paradigm. Qualitative researchers:

1. focus on the insiders' perspective and talk with people who have had firsthand experiences with the educational activities or procedures being investigated;
2. might observe or participate in the activity themselves to gain firsthand experience;
3. consider the changing or dynamic nature or reality;
4. attempt to study whatever is being investigated as a whole to gain a complete or holistic view;
5. use research procedures that are flexible, exploratory, and discovery oriented;
6. use research procedures that allow the researcher to change or add to the types and sources of data gathered as the study progresses;
7. focus on subjective data, data existing within the minds of people and typically expressed or reported in natural language;
8. collect data in a naturalistic manner;
9. tend to concentrate on the actuality of experience validity that is representative of a true or full picture of what the researcher is attempting to investigate; and
10. seek to gain a thorough, rich, and deep understanding of the topic under investigation.

The Stainback and Stainback's statements are consistent with the five characteristics of qualitative research listed by Bogdan and Biklen (1982).

Qualitative research:

1. has the natural setting as the direct source of data and the researcher is the key instrument;
2. is descriptive;
3. is concerned with process rather than outcomes or products;
4. tends to be inductive;
5. focus on "Meaning."

Bilingualism is a widely observed phenomenon; however there seems to be a lack of interest in understanding the process of acquiring bilingualism. People do acquire two languages sequentially or even simultaneously and use one or the other depending on social context, task, situation or the other depending on social context, task, situation or target person. No one should be surprised that humans are predisposed to be lingually adaptable. Instead of seeking components or factors of or pertaining to this predisposition, an attempt should be made to perceive and understand it in its entirety. Giorgi (1970) stressed that deep and careful description of the lived-experienced would lead to a meaningful understanding of phenomena such as the lived-experience to describe the experience of acquiring and using bilingualism and help the bilinguals who have experience-based insight into their remarkable bilingual abilities.

C. Inappropriateness of a Quantitative Research Methodology

Phillips (1986) wrote, "The traditional scientific approach is mechanistic; it uses precision and rigor to derive quantitive measures which supports or

rejects hypotheses" (p.36) A natural science researcher does not normally start collecting and analyzing experience-based data unless she/he has operationally defined constructs for hypothesis formulation. S/he needs to establish what to look for and test the validity or representativeness of formulated hypotheses. To reach this end, s/he often has to reduce the complexity of the phenomenon and get hold of the measurable and controllable "components" or factors. S/he needs to know effects of one or two variables on the particular aspects of phenomenon being studied presumably in order to be able to manipulate such effects.

Suransky (1980) questioned the advisability of extrapolating a natural science model to human existence and human essence and stressed that:

> The contextual paradigm from inanimate and mechanical is not the same as a new paradigm that stresses the essential humanness of behavior, action, learning and experience. Behaviorism focuses on exterior, measurement and control rather than understanding the nature of human beings, the mystery of the human condition, but rather to control and adapt the individual to a predefined set of norms. All human processes are subsumed under a measurement reductionism (163).

Suransky believed that a natural science research methodology that quantifies or describes the observable, measurable and controllable aspects of human behavior would be inadequate. S/he felt that there would be more to the humanness of the human beings that could be studied through a natural science methodology. Valle and King (1978) noted a paradox in the

behavior patterns of natural science researchers with the following statements:

> His actual living takes place in a world of solid, tangible, and substantial matter, and yet he denies these lived-world experiences when he adopts his scientific theoretical attitude; as an ordinary citizen, he affirms his everyday experiences of his world, but as a scientist he denies them (48).

I do not intend to find out how the particular factors (variables) of bilingualism affect the others (causality). I would seek to describe and understand the phenomenon that involves acquisition as subjects I want to involve them as responsible co-researchers in the processes of collecting, analyzing, describing and synthesizing their own experiences. I feel that a human science methodology is more appropriate than a natural science methodology in developing an understanding of the phenomenon in question. Descriptive research does not obviate the use of natural science type methodology in looking for causal relationships within the deaf bilingual context. In fact, qualitative research can provide a better basis for formulating hypotheses.

D. Rationale for Qualitative Research

Since the intent is to use experiential data to describe the acquisition and use of bilingualism, rather than measurement, a descriptive research methodology is required.

The acquisition and use of ASL/English bilingualism is observed but little studied as a phenomenon. It has probably not been studied much because it is difficult to define operationally.

Bimodal bilingualism (Mason, & Carver, 1986) involving ASL and English is generally not well known or accepted by educators in deaf education. At the time of this dissertation, Alberta School for the Deaf was probably the first school in North America where deaf high school students started earning credits by studying ASL as a language in the fall of 1989. Meanwhile French language courses have been offered in almost every major urban area in Canada for years. This difference may be construed to substantiate the claim that French/English bilingualism has been more respected as compared with ASL/English bilingualism. Secondly, the deaf bilinguals have not been asked to share their perspectives on how they have acquired and used their bilingualism. Because of these assumptions, a descriptive phenomenological research methodology is determined as most appropriate for describing the experience in acquiring and using this type of bilingualism. This is consistent with the goal of understanding rather than abstracting generalizations from the phenomenon. The best method of gaining access to the experience is through collecting experiential data with the help of the co-researchers. Inductively analyzed data may become reliable and valid materials for formulation of structures that reflect the experience of acquiring bilingualism.

III Method

A. Overview of Phenomenology

Since the intent of this qualitative research is to describe the experience of acquisition and use of bilingualism, efforts will be made to adhere to the eight principles of phenomenological research (Giorgi, 1975): (a) fidelity to the phenomenon as it is lived, (b) primacy of the life-world, (c) descriptive approach, (d) the subject's view of the situation, (e) a structural approach to an interactional context, biographical emphases, (f) and engaged researchers, and (g) search for meaning.

Giorgi (1975) listed the following steps of phenomenological methodology:

1. Naive description of the phenomena accomplished via an interview with the subject.
2. The researcher reads the entire description to get a sense of the whole.
3. The researcher reads the description more slowly and identifies individual units.

or

4. The researcher eliminates redundancies in the units, clarifying or elaborating the meanings of the remaining units by relating them to each other and to the whole.
5. The researcher reflects on the given units, and transforms the meaning from concrete language into the language or concepts of the

science.

6. The researcher then integrates and synthesizes the insights into a descriptive structure which is communicated to other researchers for confirmation and/or criticism.

B. Selection of Co-Researchers for Interviews

The individuals had been judged as bilingually experienced, and they had to be willing to articulate their experience in one or more interview sessions. Deaf adults were the main co-researchers because of the uniqueness of their ASL/English bilingualism. Two hearing bilinguals, one with ASL and English and the other one with French and English, were also included as co-researchers. Their experience-based data was analyzed in order to find out if deaf bilinguals and hearing bilinguals have common experiential structures for bilingualism.

The biographical information on the co-researchers is located in Chapter Four. This way, the reader has a more convenient access to the information while reading the lengthy tables of excerpts, paraphrases and themes.

C. Interview (Data Collecting Phase)

Kvale (1983) has outlined the aspects of understanding in the qualitative research interview:

1. The interview is centered on the interviewee's life world;
2. The interview seeks to understand the meaning of phenomena in

his/her life-world;

3. It is qualitative, descriptive and specific;

4. It is presuppostionless;

5. It focuses on certain themes;

6. It is open for ambiguities and changes;

7. It depends upon the sensitivity of the interviewer;

8. It takes place in an interpersonal interaction, and it may be a positive experience (174).

As a principal researcher in this study, I encouraged articulation of personal experiences, asked elaborating questions, probed for supplementary information, collected and analyzed the co-researchers' experience-based data.

The planned interview phases included the structuring interview, the data gathering interview and the corroborative interview. The phases are discussed in greater depth:

1. In this structuring interview phase the co-researcher's interest in sharing his/her experience in acquisition and use of bimodal bilingualism was stimulated with orientation to the nature of this phenomenological research and understanding of his/her role as a co-researcher rather than as a subject. The co-researchers' rights based on the University of Alberta Department of Educational Psychology Ethical Guidelines (Appendix C) for research purposes were discussed and mutually understood.

2. The data gathering interview started with focusing questions to give the questions to give the co-researcher an indication of the scope of this

research; subsequent questions were asked on the basis of the co-researcher's experiential data. The principal researcher attempted to avoid the a priori effect and focus on collecting and recording the co-researcher's experience with the phenomenon. Specific questions were also asked to open up new areas or probe deeper into certain aspects of the experience. Co-researchers were encouraged to volunteer relevant information at any time during and after the session. In subsequent sessions co-researchers were asked to read the written protocols of their shared experiential data and invited to provide feedback in order to validate the accuracy of the written version. After the researcher had initiated reflection and analysis upon the protocols, samples of the written meaning units were discussed with the co-researchers in order to show how they were derived from the data. Such meaning units may be used to encourage co-researchers to give additional pertinent experiential data. This interview phase ceased when further data seemed to be redundant, repetitious, and discovery of new meaning units unlikely.

3. In a corroborative interview, the psychological descriptions were read by and discussed with co-researchers in order to ascertain whether the descriptions represented their experiences of acquiring and using bilingualism correctly. Revisions were made to improve the accuracy of the descriptions.

Interviews with the co-researchers concluded with statements that accurately represented the experiential data. Syntheses of the review of literature and personal observations in combination with further readings were included in the process of cross-validating the conceptual description of the

phenomenon. When apparent incongruencies emerged, discovered meaning units were used to explain perceptions, findings and syntheses of the literature review.

D. How the Data were Gathered and Recorded

Signed dialogue between the principal researcher and the four deaf co-researchers was video taped and analyzed. One of the two hearing co-researchers' data were also video taped and analyzed. The data of the second hearing co-researchers were audio taped and analyzed. The deaf and hearing co-researchers were asked to provide additional information in writing at any time. Subsequent interviews were held to collect supplementary data. As a much less reliable method of data gathering, one of the co-researchers was asked to write responses to a number of prepared questions. Data collected from the four deaf and two hearing co-researchers were transcribed and analyzed.

E. Analysis and Synthesis

Analysis of original and supplementary data followed the collection, interpretation and transcription into typed English. It took the following form:

1. Significant excerpts of the protocols were translated/interpreted, typed, numbered;
2. The excerpts were paraphrased and given subordinate themes;
3. The subordinate themes were clustered; each of the thematic clusterings was followed with a description;

4. Thematic clusters were synthesized into Higher Level Themes which were also described in general terms;

5. Higher Level Themes were synthesized into Main Themes which were also given generalized descriptions.

After all the protocols of each co-researcher had been processed the same way, all of the main themes of each co-researcher were listed under Common Themes. The Common Themes were described. Common and uncommon themes were then discussed.

These processes of analysis and synthesis were adapted from the processes suggested by Giorgi (1975) and Colaizzi (1978).

F. Bracketing of Presuppositions

Angeles (1981) defines phenomenology as a study and description of "the intrinsic traits of phenomena as they reveal themselves to consciousness" (p.210). In order to study and describe the traits properly, the researcher attempts to avoid contaminating the traits with his/her own presuppositions and biases. Husserl (cited in Angeles, 1981) elaborated on a definition of bracketing:

> By purifying one's perspectives in this way, one is able to see things as they actually appear to consciousness. The aim of philosophy is to describe, classify, and intuitively grasp the variety of kinds of experience and consciousness in their purest subjective state and in their concrete operations (p.27).

Bracketing is a process of articulating the researcher's "predispositions and biases through a process of rigorous self-reflection so that those who read reports of the research will be able to take the frame of reference of the researcher into account" (Osborne, 1989, p.11). The researcher is the one who formulates the research questions, collects and transcribes data, and writes interpretations; therefore his/her personal involvement in the research is inevitable and unavoidable. Bracketing, in a way, reveals the traits of a phenomenon to the reader through the researcher's perception. A reliable researcher maintains fidelity to the phenomenon and permits the reader to have a clear perception and understanding of the phenomenon. My goal is to describe the phenomenon of deaf bilingualism so well that my readers have an opportunity to understand its essences. I believe that the reader should have some prior understanding of my personal experiences, views and predispositions as well as my intent not to allow them to compromise the fidelity to the co-researchers' lived-experiences.

I assume that I was exposed to spoken English before I became deaf at the age of three as my family spoke the language. I do not have any recollection of speaking and hearing it in my years of life. I do not recall any experience of using any language after I became deaf and before I started attending the residential school for the deaf where I learned to spell my name probably for the first time when I was six. At the school, no one seemed to have taught me how to communicate with peers with the sign language; it seemed that I started using the sign language right away.

As an adult, I consider myself bilingually experienced and competent with ASL and English. I believe that my ASL is so advanced that I could use it to discuss anything with competent ASL users. Even though my English skills might not have developed as well, I transcribe information originating in ASL into written English with confidence.

As a deaf academic teacher of the deaf, I have been observing bilingualism among my deaf students inside and outside the classrooms for years without realizing that they have been bilingually experienced. They have been switching between ASL- and English-based languages outside and inside the classroom. With the deaf persons, they tend to use ASL and attempt to use one or another variation of manually coded English (signing and fingerspelling in English.) As a graduate student, I have been doing research work on deaf bilingualism and biculturalism. As a deaf adult, I have gained considerable experience with ASL and one or another method of English language like the Rochester Method (fingerspelling), at least three different systems of signed English, speech and speech reading. In my first years as a classroom teacher, I was required is fingerspell with my students all the time. In the following years, the school communication policy was reviewed, and I was required to use my speech in combination with a signed English system. Until recently I did not realize that my speech skills had not been so good as some of my hearing colleagues led me to believe. When I was young I hesitated from signing in public places probably because I was taught that signing was inferior to speech. As an adult, I finally realized and appreciated that ASL had always been a bona fide language. In more recent

years, I have been using a bilingual approach with ASL and English. I feel that I have enough ASL and English skills to communicate with hearing persons with limited ASL or English skills.

I have been working on my English writing skill development for years and like to believe that I write more efficiently than ever before. I read better than I write.

I also cannot deny that I have preconceived ideas about the reality of deaf bilingualism. My friends, colleagues and acquaintances having been using either ASL or English for years; all of them seem to be enjoying advantages of ASL/English bilingualism. Some of them who had been trained to lipread and speak during their growing-up years have decided to take up ASL lessons and use it as their primary social language. They have been switching between ASL and English without really realizing that they have been bilingually experienced or even bilingually competent.

I enjoy communication with hearing people through sign language interpreters or the paper-and-pencil method. I prefer direct person-to-person communication to indirect communication through an interpreter. I seem to enjoy socializing with deaf individuals more than with hearing individuals probably because of our shared visually-based language and culture.

I proceed with my study on the phenomenon of acquisition and use of bilingualism with no intention to contaminate the co-researchers' experience-based data with mine. My co-researchers will ensure that the transcriptions and interpretations of their lived-experiences are accurate.

G. Validity

Kvale (1986) said, "Validity involves the question of whether a method investigates what it is intended to investigate" (p.9). He added the following thought provoking questions:

> Does the interpretation of an interview concern what the statements say about the world or about the interviewer himself? Is it facts or meanings which are investigated in the interview? Does an objective truth about social reality or a relativistic multitude of realities exist? And, what is the essential nature of the phenomenon studied? (p.9).

With the above questions, Kvale might hint that our intent to investigate the phenomenon of acquiring and using bilingualism seems far-fetched. One may predict that my co-researchers and I would probably have trouble distinguishing the observed phenomenon of bilingualism from a preconceived phenomenon of bilingualism.

Osborne (1989) pointed out four major ways to assess the validity of the researcher's interpretations in phenomenological research:

1. First, by bracketing his/her orientation to the phenomenon and carefully describing the procedure and data analysis, the researcher provides the reader with the opportunity to understand his/her interpretations of the data.
2. Second, during collection and interpretation of the data, the researcher can check interpretations for goodness of fit with the co-researchers.

3. Third, the most crucial means of validating interpretations of phenomenological data is the juridical process of presenting coherent and convincing arguments.

4. Fourth, the final check on the validity of the interpreted structure of the phenomenon depends upon the extent to which that structure resonates with the experiences of other people, not in the study, who have experienced the phenomenon (p.28).

The process of validating through bracketing is subjected to the reader's acceptance of the sincerity of the researcher's intent to present to the reader the descriptions of the co-researchers' lived experiences. The reader should be able to identify the essences of the experiences in the data. Misinterpretation of certain signs or words is not expected to jeopardize the fidelity to the co-researchers' lived experiences.

The videotape did not only record the data preserved in ASL with its paralinguistic features. It also shows the context in which the researcher and co-researcher were involved in person-to-person dialogue. The co-researcher may wish to review the tapes to ensure that the transcriptions have been accurate.

Validity is achieved by relating the identification of the constituents and variations of the phenomenon to reflective analyses of the life-world situation. The success (validity) of the question put to co-researchers depends upon the extent to which they tap the co-researchers' experiences apart from their theoretical knowledge of the topic (Colaizzi, 1978).

H. Reliability

Phenomenological researchers recognize "the inconsistency, variability and relativity of human perception" (Osborne, 1989, p.26).

Confidence in the individuals' reported perceptions of certain aspects of phenomenon constitutes as the basis of the consistent perception of the phenomenon in this study. Kvale (1986) discussed the role of questioning in interview sessions. Reliable questions elicit articulation of the lived-experiences which may be retold with the same confidence. The individuals who do not have direct contact with the experience may not be able to provide reliable information on it.

One of the ways to validate the reliability of information is through asking the individual further questions to elaborate on their original information. When there is little, if any, problem in elaborating on the original data, the researcher may believe that the previous articulation of experiences is reliable. If there is no significant discrepancy between the original and supplementary data, the researcher may have confidence in the data.

Unreliable questions elicit theoretical perspectives on the phenomenon or even encourage compromises with the questioner's biases.

As long as the co-researchers recall their lived-experiences and help in validating interpretations of the data, the reliability of the data collection and the validity of descriptions should not be compromised.

IV. Results and Syntheses

A. Introduction

The reader is asked to put aside all her/his biases and presuppositions and focus on the lived-experiences of the following co-researchers: Rosa, Gofer, Ella, Liz, Norma and Ette. S/he is encouraged to read the interpretations of their experiences as provided.

This chapter is comprised of four levels of analysis of each of the co-researchers' experiences. Each of the higher level of analysis includes the lower level analyses. There is a synthesis of each co-researcher's lived-experience at the end of each analysis. At the end of this chapter, there is also an overall synthesis of all the individual syntheses. Educational implications with recommendations are located in Chapter V.

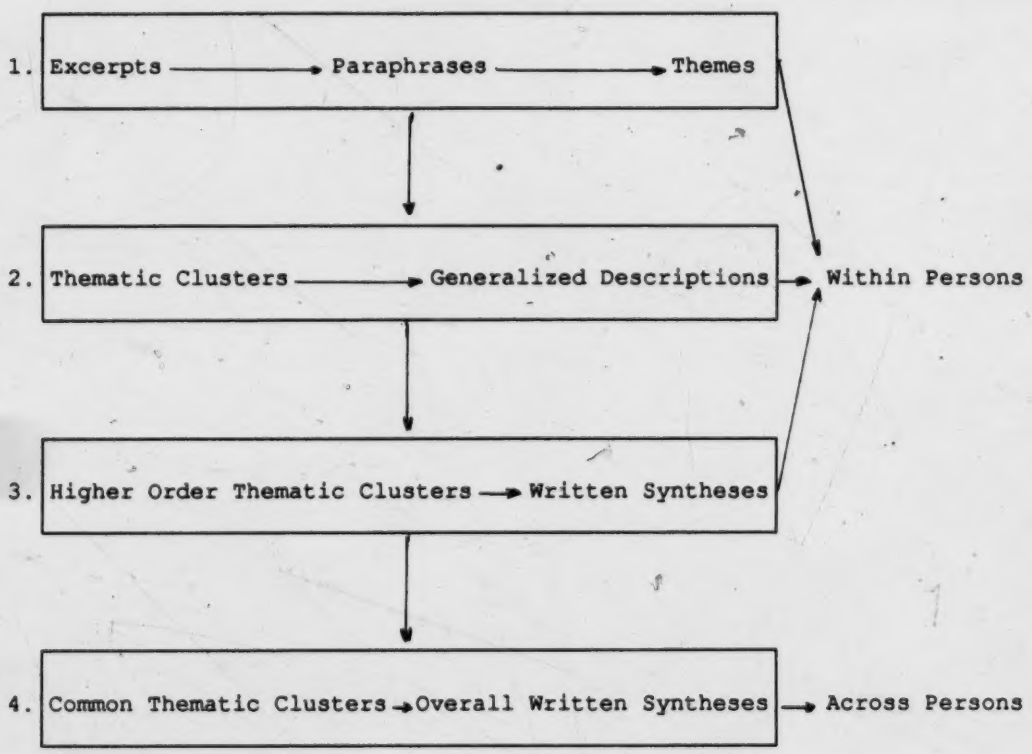
The numbered tables containing the different levels of analysis of the co-researchers' experience-based data are indicated: Rosa (1, 2, 3 and 4); Gofer (5, 6, 7 and 8); Ella (9, 10, 11 and 12); Liz (13, 14, 15 and 16); Norma (17, 18, 19 and 20); Ette (21, 22, 23 and 24).

Tables 1, 5, 9, 13, 17 and 21 contain excerpts of the co-researchers' experience-based data transcribed from the video and audio tapes and paper. Paraphrases and Themes are presented in columns two and three. The excerpts, paraphrases and themes are numbered in relation to each other. Tables 2, 6, 10, 18 and 22 contain thematic clusters from protocols and descriptions. At this level of analysis, the protocols have been clustered according to their similar descriptions. Tables 3, 7, 11, 15, 19 and 23

present Higher Level Themes and Descriptions. The themes of the clustered protocols have been interpreted and grouped under Higher Level Themes. Tables 4, 8, 12, 16, 20 and 24 conclude with common themes and descriptions. The common themes subsume the preceding themes; descriptions of the common themes appear in the adjoining column. The outline of levels of data analysis is illustrated below:

Figure 1

Levels of Protocol Analyses for Within and Across Persons


1. Excerpts → Paraphrases → Themes
2. Thematic Clusters → Generalized Descriptions
Within Persons
3. Higher Order Thematic Clusters → Written Syntheses
4. Common Thematic Clusters → Overall Written Syntheses → Across Persons

There is a written synthesis at the end of each individual analysis. The synthesis highlights reflections and interpretations of the analysis of each co-researcher's lived-experiences. The numbers within the bracket in the synthesis text look like this: (9.34). The number "34" represents the excerpt no. 34 in Ella's Table 9. The "e" in "17.6e" represents the supplementary excerpt no. 6e in Norma's Table 17.

The reader is advised to read excerpt, paraphrase and theme in sequence before moving on to the next excerpt down the column in the same table. After having read through the series, the reader may wish to read and reflect upon the synthesis on each co-researcher's experience.

The discussions and implications are contained in Chapter Five.

B. The Co-Researchers

Four deaf and two hearing co-researchers are involved in this research. All of them are adults with considerable bilingual experience and competency. The examples of bilingualism in this study include ASL/English, English/ASL and French/English. The adult co-researchers had very different preschool language and communication experiences. To protect their confidentiality, they have been given the following names: Rosa, Gofer, Ella, Liz, Norma and Ette. Their age in the bracket is estimated.

Rosa

Rosa (40 years) was born into a hearing family. She spent much of each school year living at a residential school for the deaf. At home she used gestural/oral language with her sibling and ASL with her peers outside

the classroom at the school. Inside the classroom she was learning English skills.

Ella

Ella (45 years) was born into an all-deaf family; ASL was the language of her family. Her first school experience was in an oral day program. She later transferred to a distant residential school during her preadolescence. ASL was allowed outside the classroom but English was emphasized inside the classroom with the teachers.

Gofer

Gofer (50 years) was born into a hearing family. His deafness was not discovered until he was about two years old. English was the family language and Gofer was expected to learn and use oral English. He spent much of each school year living in a residential school for the oral deaf. He learned ASL in his late teens.

Liz

Liz (40 years) was born into an all-deaf family; ASL was the language of her family. She lived in a residential school and went home every other week-end. Students and staff members signed anywhere in the school. Her first language was ASL. She studied English at the school.

Norma

Norma (35 years) was born into an all-hearing family. English was stressed as a very important language in the family. Norman attended English-based schools. As a young adult, she took ASL courses and eventually became one of the premier interpreters in the Deaf Community.

Ette

Ette (45 years) was born into an all-hearing French-speaking family. Her early school experience was in French but all of her schooling, after the third year, was in English. She remained very much attached to her first language through occasional French courses and visits with her family.

Table 1

First Level Thematic Analysis of Rosa's Protocol

Excerpts of Rosa's Protocol	Paraphrases	Themes
1. I do not recall much. It looks like I depended on lipreading much. I kept on looking at the mouth movements. And also my sister and I created and used home signs (gestures).	1. How her language started is difficult to ascertain; her sister played an important part in communication skill development (speech and gesturing) in early years.	1. spontaneous language development
2. How my language developed further, I am not sure; however I suspected that I started with lipreading and gesturing. I am one and half years older than my sister.	2. Speech and gesturing are recalled as important communication means with her younger sister.	2. visually based language methods
3. It had to be from my sister and lipreading - looking at the faces of people; it looked like they were talking to me. Parents could not sign but I looked at them when they were talking. I wondered what they were talking about. I recall having seen the mouth movements with some facial expressions. I think that had something to do with my language development; I think that was when I started.	3. Mouth-talking among family members had been an observed phenomenon; she recalls her attempts to gain access, to take part, in this social phenomenon. This might have stimulated her visual language development.	3. visual recognition of language
4. I am not sure but maybe ... from gestures. Gesturing seemed to be important in communication between myself and my sister. Then I was at school, I recalled learning English language. It is not possible to imagine myself starting off without any form of communication or language.	4. Gesturing with her sister seemed to be the main means of communication with her.	4. recall of gesture as basis for language

5. My first language was visual - gesturing, pointing here and there. Gesturing (dead) meaning dead, my young sister made a gesture "Dead"; I knew it meant dead. When we were small we understood ourselves in our own language.	5. Concepts like "death" were explicated through specified signing patterns; entering her first year at school without any form of language was unthinkable.	5. gestural language
6. When we were at school, we were learning how to use their langauge. When we were at home, we changed to our own language as it satisfied our need to communicate with each other. We used a sign language with friends at school but at home we switched to our special home language.	6. At school she faced the challenge of learning the school language which was dissimilar from her sibling language to which she reverted when back at home; an early form of bilingualism.	6. adapting to different languages
7. I did not think that the deaf sign language was really a formal language. It did not have to be necessarily formal.	7. She knew that signing and gesturing were essential means of her communication system without realizing their significance.	7. signing thought as non-lingual
8. I was ambitious with my writing development. I wanted to improve my writing in English. I think I had a desire. I think it had something to do with my attitude which was always positive.	8. Learning English language skills was an important part of her language related consciousnness; always ambitious, wanting to improve her skills with it.	8. anxious to achieve
9. I remember a good teacher saying "good, good" for my work; I always received high marks for my school work and I kept up with good progress.	9. Teachers' praises for her good work followed with high grade marks meant a lot to her; her work ethics described as excellent.	9. reinforcement at school
10. I remember reading story books like Oliver and Jane Eyre. Those books looked like good quality classic books; I was reading them when I was probably 11 or 12 years old.	10. Good feelings associated with the accomplishment of having read good quality books in her pre-adolescent years.	10. meaningful language activity - reading
11. The years before my age of 11 and 12 recalled	11. In the preteen years mechanical rote learning of	11. written skill still difficult to use

copying and copying news compositions from the chalkboard; I do not remember having ever written in my own words...no, no. I had to copy and copy; that was all.	English grammar samples was recalled as significant classroom activity; no creative writing in her own words.	
12. The hearing teacher tended to write on the board and fingerspell; I did not get clear information probably due to the different code of communication.	12. Hearing teachers were difficult to understand with their methods of communication.	12. teacher difficult to understand
13. Do you remember Mr. D.A. Model III, the deaf Canadian? He went to Gallaudet and came back. His signing was very fascinating. I was attracted to him because of his clear signing. I grew up rote learning English and often I found teachers presentation vague or unclear, but through him, I began to understand English word order better.	13. The emergence of a deaf teacher at her school became an important event in her English language learning process; his clear signing added greater meaning to her reading materials which were in English.	13. the deaf mentor as a teacher
14. I would not put aside the book; I felt the urge to keep on discovering more relationships between signed and printed messages. I became a more purposeful reader. Sometimes I found something incomprehensible during my reading; someone came along and interpreted it possibly at PSE. Then I saw the light. The more language I had, the better I understood and was able to translate it into ASL.	14. Inspired by the new meaningfulness in reading activity, she became a serious reader, anxious to comprehend much of the material; the more confidence she had the more she could translate into sign language.	14. the adventure and excitement of learning see more meaningful
15. Mental imageries began to open up like movie scenes while I was reading stories like those of Oliver and Jane Eyre; mental imageries developed vividly.	15. When reading mental imageries emerge as if she was totally involved in the story.	15. use of mental imageries

16. I enjoyed reading a lot more. Even though I did not just want to improve my English, I would watch out for more grammar ordering as well as switching between English and ASL when I was 10-12 years old.	16. Enthusiasm with her reading coinciding with her desire to improve her English skills.	16. interest in English enhanced through reading
17. Oliver Twist, is that you were talking about? Ok. Dr. D.A. Model III was signing very clearly. I was not sure whether it was in Sign English or ASL.	17. Whether it was ASL or Signed English not ascertained; clear signing was important.	17. blending of two languages
18. It was in lively ASL signing; I understood the stories well.	18. Clear signing correlated with enhanced reading comprehension.	18. ASL as primary
19. I was always interested in school during my growing up years, interested in reading. I do not think Mr. D.A. Model III was the turning point. I had always been interested in reading and improving my English skills.	19. The emergence of the deaf adult role model only an additional support for her long time enthusiasm in school work.	19. deaf mentor vs intrinsic motivation
20. I do not worry about translating between the two (ASL and English); I think something is already established in my mind which permits me to switch freely between the two languages. I do not have to worry about I do it. I have already gone through a learning process with both languages. I do not struggle with my thinking at all.	20. No problems in translating between sign language (ASL) and English.	20. bi-/multilingual fluency
21. No, no. no. I do not think in ASL, not in words but just ... it looks like lipreading...it is vague in my mind.	21. Neither ASL signs or English words seemed to be perceptible in her thinking; lipreading was vaguely discernible in her dreams.	21. thinking perceived as language independent
22. Talking about reading ...when I was small I did a lot in written dialogue/ conversation with hearing people. I was talking with	22. Written dialogue with hearing people enjoyed during adolescence was a reliable means of communications; enjoyed	22. written dialogue enjoyed

hearing people this way when I was between 14 and 18 years old. Also I communicated with the teacher in the hearing school through this way - paper and pencil. I had learned how they used their words. I also wrote letters.	writing.	
23. Although my mother and father did not have much formal education, I learned some English language from them as well as from friends and my hearing sister. I think that letter writing is very important.	23. Parents' educational backgrounds seemed to have no bearing on her enthusiasm at school.	23. parental support essential for communication
24. Action in dream; it looks like in action. It looks like I read people's mind, knowing what is going on without using either ASL or English. Our sign language? I doubt that I have ever seen signing in my dreams. It seems that I have been reading other people's mind as well as they reading mine. It looks like I was the central of activities in my dreams.	24. A form of telepathic or mental language rather than ASL or English seemed perceptible in her dreams; this elusive "language" is difficult to define; the uniqueness of self a focal point in the dreams.	24. telepathic dream language
26. I seem to be using more English structure in my signing, I think. I have feelings...how my friends respond to my style of communciating. As I was signing, I notice that my friends would interpret my signing into their ASL signing.	26. Her own language is described as more English than ASL based.	26. English and self-consciousness
27. I have no problem understanding talk in ASL. I think I am more English oriented because of my exposure to English in my growing up years. I have hearing family members who spoke in English; furthermore English was stressed at school.	27. No problems with translating between ASL and English. She felt that English was actively promoted.	27. bi-/multilingual flexibility, language synthesis

28. Switching between the two languages...at school my schoolmates and I signed casually. I think in my teenage time, I was more conscious with my English with efforts to improve on my signing skills - in English. At Gallaudet I discovered greater flexibility than ever before. I learned that I was better to become more flexible through combining English with ASL into PSE.	28. Early form of bilingualism manifested in her inclination to switch between the "classroom language" and her peer language; more conscious with English than with peer language.	28. bi-/multilingual flexibility, language synthesis
29. Too much attention to the word order, verb tenses and things like that of English interfered with communication, making it less enjoyable. Putting words in order, stopping, thinking and worrying too much about English would not permit a natural language flow. I think if I had used more English, it would have become my natural language eventually. When I was learning English in my first years at school, I found it awkward and difficult to use freely while knowing that I needed more practice.	29. English consciousness seemed to have some handicapping effect making it difficult to be creative with it; guilt feeling associated with a brief that she should practice more with English.	29. formalism as a barrier to communication
30. I had been telling my students that they might not be comfortable with English but that with more exposure to it they should be able to use it better eventually. It happened to me; I was awkward with my English in my growing up years.	30. The self-consciousness related to self-assessed inadequacy with English seemed to be prevailing through adulthood.	30. the developmental aspect of languaging
31. Negligence can hurt learning enthusiasm. The close relationships I enjoyed with my sister permitted us to talk a lot; my mother always challenged me to focus on them and understand what they were saying. If I had	31. Language is viewed as closely related to her experience in communication with her sister and the role she played in challenging her to retain in tune with what was going on at home.	31. parental support as base for learning

been neglected or if I had not been for my good relationships with my sister, I would have become a different person.		
32. The teachers were giving me positive reinforcements; I recalled feeling good with them during my growing up years. I got 100% all the time; however it became strange as I noticed that they did not give me more challenging work. I suspected that they had given me good marks to satisfy me.	32. Good feelings associated with high grade marks given to her for her good work; however there was a feeling that she was not challenged enough at school.	32. effects of reinforcement on affective aspects
33. A woman, Mrs. D.A. Model...you know her. Anyway when I was 14 or 15 years old I recalled good relationships with her. She had good English; she helped me in correcting my writing mistakes. She also discussed things to self-assessed inadequacy with English seemed to be prevailing through adulthood.	33. Another deaf adult role model was very important to her during her adolescence; this female model inspired her further interest in English language learning; attributes of the role model do count in the eyes of the adolescent.	33. deaf mentor as a role model
34. Good marks for my paper work, my good feelings about myself, the teachers' praises for my work and their telling others about my work, people visiting in my classroom showing admiration for me all made me feel good. I recall the uncomfortable but good feelings when they said that I was smart. I do not recall receiving much praises from my parents. At the residential school I got praises since I had spent much of each year there.	34. Teachers telling other teachers about the good work worked well in promoting her interest in school work.	34. reinforcement, explicit at school and implicit at home
35. Parents did not directly praise me, but they had a different way of praising me. They usually told	35. Because of the amount of her time spent staying at the resdiential school, parents did not	35. reinforcement, explicit at school and implicit at home

other family members and their friends how well I had been doing at school. Our home 40 miles away; I stayed at school even during weekends. Only at the school the teachers and houseparents gave me direct praises for my performance.	have much to do with her school work performance.	
36. I seem to understand and feel comfortable with language; now I feel I can use a language to process a lot of things in my mind. I feel that I have been learning more uses of a language; it is hard to explain what I meant.	36. Today as an adult she has much confidence with language, sees herself learning more about it and its powers throughout her adulthood.	36. sense of linguistic competence
Rosa's Supplementary Excerpts	Supplementary Paraphrases	Themes
1e. Related to my experience, I recall being able to lipread but when the talking became complicated I could not follow it. Whenever they noticed that I was unable to understand what they were saying, they would decide to move their lips slowly to make it easier for me to understand. They would simplify their statements. I felt good being able to understand such statements through lipreading.	1e. Family were sensitive tc the child's need to become involved; they made efforts to involve her through slowing down their lip movements and simplifying their statements to encourage lipreading.	1e. family support for language involvement
2e. The conversation was not always sustaining since the purpose of such simplified conversation was typically to give me messages rather than to engage ourselves in a conversation.	2e. The type of conversation between hierself and family members was a type of information reporting rather than information sharing in a typical sustaining conversation.	2e. functional communication
3e. With my sister, we were very close; we could converse normally with our home-made sign language in addition to our speech. I recalled not having much of	3e. She relied only on her younger sister for chatting type of conversation in her family; no recollection of similar type of experience with the other family	3e. reliance on sibling for communication

this type of conversation with the other members of the family.	members.	
4e. Sign language in a conversational situation is as informal as the spoken language. I have noticed that sign language users change their style of signing when giving a formal lecture. It is like writing; both deaf and hearing people express their thoughts in writing for lectures or reports. Their writing style would be different from that of informal writing in a dialogue situation.	4e. Functional language awareness; there are places and times for formal as well as informal language methods; signing, writing, speaking, each language is perceived as adaptable for my situation.	4e. formal/informal signing
5e. My attitude toward the sign language during my younger stage of growth was good; while knowing that I was good with the sign language, I tried to learn to speak vocally well. I tried to speak well so I used my voice but I was not always successful with vocalizing.	5e. Attitude toward the sign language was always good throughout her life; usually conscious with efforts to improve on her English methods including speaking; her own limited squeaking skills recognized and accepted.	5e. early attempts for vocal language
6e. I attempted to combine speech with signing at the same time, I found this combination clumsy. It was like a struggle to combine different kinds of language codes. With more practice I began to feel more comfortable using both codes.	6e. Efforts to combine speaking with signing turned out to be futile and awkward.	6e. difficulties of oral/ gestural methods
7e. It was a long development; however I know that that my speech skills had not developed well enough for hearing people to understand me. For that reason I had quit using the voice; instead I have been continuing with lip movement skills. I think it has something to do with my mental processes; I still	7e. Her own speech skills were accepted as limited; no confidence in use of voice but comfortable with making appropriate mouthing/lip movements to represent speech words.	7e. abandoning of vocal language

make appropriate lip movements for others' speech reading.		
8e. The book, Jane Eyre, is a classic book. Anyway, when I was able to read books such as those, my mind was absorbing much information on the action of the characters. It seems that I would be watching movies instead of reading. The difference was that I "saw" visualization in my mind. I was so inspired that I felt the need or urge to read other books.	8e. Book reading activity is experienced as similar to movie viewing activity; the story is imaginally processed the same way; this type "immersion" in the book story really turned on her reading enthusiasm.	8e. visualization as cognition
9e. At that time when copying information from the board in the classroom I did not feel anything; I just understood what was being said. I recall having copied news digests for my letters, perhaps in my earlier stage of language development.	9e. Thought nothing of copying, copying from the chalkboard in the classroom during her school days; she just understood what she was copying.	9e. copying, a confidence builder
10e. I think it was OK to copy sentences to get the feel of sentence writing. In later stages of development the students should be encouraged to develop creative writing with some help for grammar corrections.	10e. Rote learning through the means of sentence copying is still thought of as an appropriate learning strategy; creative writing would develop.	10e. copying exercises deemed OK
11e. I recall feeling good when I was able to write letters but I was weak in writing compositions for classes. I had a struggle with my composition writing at Gallaudet.	11e. Struggled with English writing at Gallaudet University; her writing was described as weak; letter writing was OK.	11e. struggling writing skills
12e. I recall being unsatisfied for the difficulty in receiving enough information from those hearing teachers at the school for the deaf. They used combinations of signs, speech and fingerspelling. For example they would	12e. She felt cheated for not being able to maximize benefits from her school teachers who used English-based speech-fingerspelling combinations; they would fingerspell intermittently while speaking full statements.	12e. teachers difficult to understand

mouth move a few words and then sign or fingerspell the other words. With this type of communication mode I did not always understand what they were saying; I could not get the whole messages to have a good grasp of what they were saying.		
13e. I would get some details from one of the deaf teachers through the sign language we had been using at the school. With the sign language I could understand the whole ideas/messages; I was inspired and wanted to learn more and more.	13e. With deaf teachers and their clear signing skills, she recalled having access to the whole idea/concept units; good grasp of what they were discussing.	13e. signing as the key to languaging
14e. I felt different with him than when with the other teachers who were not fluent sign language users. The use of our sign language did affect us in an important way. I had previously explained to you how I felt about having the person teaching something in sign language.	14e. Relationship with the deaf teacher was different from those with the hearing teachers with limited signing skills; clear signing had positive effects on school attitude.	14e. importance of signing
15e. I was inspired when I could understand relationship between printed and signed message contents.	15e. Thrilled with bilingual relationship.	15e. bilingual experiences
17e. Once I understood what the story was about, I became enthusiastic and wanted to read other materials. My desire for reading just grew and grew.	17e. Reading enthusiasm linked to comprehension and enjoyment.	17e. meaningful language activity more exciting than rote learning
18e. I feel comfortable switching between the two languages; it seems to become natural for me to change to Signed English when I was in a conversation with a hearing person. I think the comfortable feeling with switching back and	18e. Bilingual switching seemed to be an unconscious-process. Switching seemed to be related to a feedback system; she adjusts to fit with her perception of the other persons's language characteristics.	18e. bi-/multilingual switching spontaneity

forth has something to do with my ability to use written English and sign language.		
19e. Either way I feel comfortable using either language. It seems natural for me. Let me tell you something. I have always thought I have been more English oriented; that is my point of view, at least. But when I was those with the hearing teachers with limited signing skills; clear signing had positive effects on school attitude.	19e. Her own language is described as English oriented, but when she used English-based signing, other people thought it was more ASL based. A puzzling phenomenon to her.	19e. blending of bilingual skills
20e. I had special feelings for her Mrs. D.A. Model. I respected her a lot because I knew that she was a deaf person who had never gone to college, but still she had wonderful English skills. Moreover her explanation through the sign language had helped me understand a lot of things.	20e. Good feelings associated with the other deaf role model, a female who also had good English skills; she was very resourceful and supportive.	20e. positive influence of deaf mentor
21e. Let me tell you how I had received praises. I do not recall anyone saying something to me about my work, but I recall having received high marks for my school work and my family members telling other people about how well I had been doing. Moreover I was one of those students the teachers would choose to show our skills to the public. You know what I meant? I do not think anyone has directly praised me; somehow it seems that I had been having much praise for my work.	21e. Praises given to her for her work were much appreciated; being selected as an example of good student boosted her good feelings; indirect praises were perceived as effective as direct praises; direct praises in the form of expressed words like "You are the best" or "You are smart" seemed not as important as indirect praises.	21e. positive effects of reinforcement

Table 2

Thematic Clustering of Rosa's Protocols

Clusters of Themes	Descriptions
1. Rudimentary oral/gestural communication (1, 2, 3, 1e, 2e, 13e)	1. In lieu of adopting their parents' language and communication methods, she and her sibling adapted to the uniqueness of deafness in all-hearing family and developed their own language method.
2. Visually-Based Communication (4, 5)	2. Rosa and her sibling developed their own rudimentary gestural/oral language method of communication.
3. Supportive Parents/Family (23, 31 1e)	3. She recalled good affective relationships with her parents even though they did not seem to have established a viable language system with the deaf child.
4. Speech Attempts (6, 7e)	4. She attempted to incorporate taught speech skills but soon realized that the useability of these skills would be limited.
5. Indigenous Bilingual Experiences (6)	5. She experienced adjusting herself to the sibling language, peer language (ASL-based) as well as school-promoted English starting in her early grades.
6. Significant Siblings (3, 5, 31, 3e)	6. The siblings established their own micro-network of communication. The sibling helped Rosa in gaining access to the other family members during her childhood.
7. Self-Concept and Language (7, 8, 19, 26, 36, 5e)	7. Her personal attitude toward school work and English language learning has always been positive.
8. Reading Becoming Meaningful During Adolescence (14, 16, 22, 17e)	8. Book reading during adolescence was remembered as a meaningful English-related activity.
9. Schooling (11, 12, 32, 9e, 10e)	9. Role learning of written English and difficulty in understanding the teachers with their limited signing skills hindered her progress at school.
10. Deaf Mentor (13, 19, 33, 14e, 14e, 20e)	10. Deaf mentors supported Rosa's further interest in English as well as giving her new perspectives on ASL/English bilingualism.

11. Cognition, Imaginal Processing (15, 21, 24, 8e)	11. Speech seemed to be the only feature of symbolic language "detected" in her dreams; ASL signs and English words seemed nonexistent in her cognitive processes.
12. Advantages of Bilingualism (18, 20, 27, 18e, 19e)	12. Incorporation of signing in her reading activities enhanced appreciation of English in printed form.
13. Bilingual Fusion/Flexibility (28, 29, 15e)	13. Awareness of being able to use both school-promoted and peer-preferred language values.
14. English Language Learning (10e, 21e)	14. Rote learning of written English skills was and still in thought as helpful and appropriate.
15. Relationships with Hearing Teachers (3, 12, 12e)	15. The hearing teachers with their limited signing skills were difficult to understand; they were generally tolerated until she had a smooth-signing deaf teacher with her.

Note. Numbers in parentheses refer to the numbers of the themes in Table 1.

Table 3

Higher Level Themes and Descriptions

Themes	Descriptions
1. Deaf Adult's Role (10)	1. Deaf mentors reinforced her positive learning attitudes.
2. Supportive Family (3, 6)	2. Parents and sibling constituted a supportive network.
3. Language Orientation (1, 2, 5)	3. Rosa was challenged to get involved in the family communication.
4. Language and Cognition (11)	4. ASL signs and English words seemed to be nonexistent in thinking.
5. Spontaneous Bilingualism (12, 13)	5. Lingual flexibility developed starting with rudimentary gestural/oral language, sign language and English with eventual strengthening of her language performance.
6. Communication and Relationships (6)	6. Parents and hearing teachers were not as accessible as her hearing sibling at home and deaf peers at the residential school.
7. Reading Experiences Valued (8)	7. This became the first meaningful English-related language activities.
8. Written and Spoken English (4, 14)	8. Speech was soon de-emphasized; English writing skill development continued to advance.
9. Schooling (9, 14, 15)	9. Schooling involved emphasis on learning of English language and its methods - supported with incentives provided by teachers.
10. Self-Concept (7, 15)	10. Always demonstrating positive attitude toward school work.

Note. Numbers in the parentheses refer to the numbers of the clustered themes in Table 2.

Table 4

Common Themes and Descriptions

Themes	Descriptions
1. Deaf Adult's Role (1)	1. Deaf mentors reinforced her positive learning attitudes.
2. Supportive Network (2, 3, 5, 6)	2. Even though her parents did not know how to sign, they challenged her to keep involved in the family affairs. Rosa's sibling was her important social partner at home and they communicated with a "sibling language". Peers at the residential schools were important to her.
3. Language and Cognition (4)	3. ASL signs and English words seemed to be nonexistent in thinking.
4. Spontaneous Bilingualism (5)	4. Lingual flexibility developed starting with rudimentary gestural/oral language, sign language and English with eventual strengthening of her language performance.
5. Reading Experiences Valued (7)	5. This became the first meaningful English-related language activity.
6. Schooling (7, 8, 9)	6. At school speech, reading and writing were stressed. Access to the hearing teachers with their weak signing skills were limited. As an adult, voice speech was replaced with voiceless speech. Writing, reading, and signing skills are valued during her adulthood.
7. Self-concept (10)	7. Always demonstrating positive attitude toward school work and English.

Note. Numbers in the parentheses refer to the numbers of the clustered themes in Table 3.

Synthesis of Rosa's Lived-Experiences

Introduction

This synthesis is based upon reflections and interpretations on Rosa's lived-experiences as analyzed through Tables 1 to 4. The headings in this synthesis reflect the characteristics of the paragraphs rather than corresponding to the themes presented in the tables.

Supportive Family

Rosa was the only deaf member of her English speaking family. She felt there were good affective relationships with her parents even though she was aware of her limited access to their spoken conversation. As a child she made efforts to understand what they were saying through visual interpretation of their mouth movements, facial expressions and body language (1.3). Her parents seemed to disregard her deafness and kept her involved with them. Her parents' care for her might have a lot to do with Rosa's lasting positive attitude toward her relationships with her siblings and peers. Even though Rosa had limited access to the family language, she grew up with good feelings towards her family. She said, "Athough my mother and father did not have much formal education, I learned some English language from them as well as from friends and my hearing sister" (1.23). Rosa eventually acquired ASL through interaction with her peers at the residential school. The "bottom line" is that good preschool affective relationships may have constituted the basis for positive acquisition or

learning of language and communication skills in school years.

Significant Sibling

Rosa and her younger sibling developed a rudimentary gestural/oral language and communication method during their childhood. Rosa recalled, "With my sister, we were very close; we could converse normally with our home-made sign language in addition to our speech" (1.3e). This sibling also functioned as Rosa's important communication link in the family (1.3e). By the time she started attending the residential school for the deaf she already had a functional "sibling language" as well as basic socilization skills. Rosa's preschool world seemed to be restricted in terms of the number of meaningful social contacts. She, however, was not socially restricted as she already had the fundamentals of language and communication with good basic social skills before she started school. At the residential school for the deaf she picked up the ASL-based sign language through her interactions with deaf peers. In summary, it appears that fundamentals of language and communication skill development are essential preparation for acquisition of one or more sophisticated languages.

Oppressive Schooling

It seems that the concept of schooling was not addressed properly. Rosa's sibling language and peer language were not supported in the classroom. The apparent goal of schooling was to promote mastery of English with little consideration for her functional languages. Paradoxically

English skills were promoted by the hearing teachers who did not use them properly. Their teaching with use of speech and occasional signing/ fingerspelling was difficult to comprehend. She said, "I did not get clear information probably due to the different code of communication" (1.12). Secondly, the way teachers encouraged written English skill development seemed to be based on uncertain pedagogical principles. Rosa always had an excellent attitude toward school and thought it was important to learn and master English. Still she found it difficult to use until she entered adolescence. She noted, "Too much attention to the word order, verb tenses and things like that of English interfered with communication, making it less enjoyable. Putting words in order, stopping, thinking and worrying too much about English would not permit a natural language flow" (1.29). When she was at Gallaudet University, with the help of the deaf professors, Rosa eventually managed to express herself more creatively. This experience suggests that the way the school promoted English skills was so inefficient that Rosa's ASL and her sibling language remained as her functional languages unilt she was in her late teens. There may be nothing wrong with the languages themselves but there was a problem with how the school promoted the viability of English.

Teacher as an Inefficient Communicator

Even though her hearing teachers stressed use of English, Rosa found their discussions difficult to follow and comprehend. Rosa (1.12e) said, "They used combinations of signs, speech and fingerspelling. For example

they would mouth a few words and then sign or fingerspell the other words. With this type of communication mode I did not always understand what they were saying" (1:12). How much Rosa was cheated out of her educational opportunities because of their communication style may never be adequately assessed. There is something remarkable about the human predisposition to acquire and use a language. The teachers as inefficient communicators did not destroy Rosa's functional language with ASL and sibling language; they simply did not know how to make English appealing enough for her to adopt and use it in her earlier school years. One may safely conclude that the teachers with underdeveloped communication style do not contribute much to the students' language development. It was a wonder that inefficient communicators were allowed to teach when the deaf students needed excellent English language models to facilitate their acquisition of English.

Reading Valued

In spite of her struggle with English skills during her childhood and adolescence, Rosa was always interested in school work and English learning was always important to her. She has good feelings associated with her positive reading skill development during her adolescence. Deaf adults played an important role in supporting her interest in English.

Deaf Adult Mentors

At a point during her adolescence she had a deaf teacher for the first time. She discovered more meaning in reading materials as she noticed

relationships between the printed messages and the teacher's discussions in sign language. Rosa (1.13e) said, "With the sign language I could understand the whole ideas/messages; I was inspired and wanted to learn more and more". Incidentally, the incorporation of a sign language into this reading lesson was a manifestation of bilingualism. Rosa also had a high respect for a female deaf staff member, who incidentally, had excellent written English skills. Rosa's association with those two deaf role models apparently made up for the deficiency in her relationship with the hearing teachers.

Teachers as Manipulators

Through her years at the school, her teachers gave her a lot of positive reinforcement with high grade marks for her test performance. While feeling that she was not challenged enough with harder tests, she accepted their praises with a grain of salt. "I suspected that they had given me good marks to satisfy me" (1.32). She knew she was not accomplishing as much as she was capable of. This may be interpreted to suggest that the teachers had low expectations for Rosa's ability to progress at school. The teachers seemed to be covering the combination of their inefficient communication skills and low expectations for students with attractive grade marks.

Bilingualism

Her preschool gestural/oral language was apparently adequate as a functional language as she experienced no difficulty in acquiring the

sophisticated sign language of the deaf. Through her socialization with peers, she started acquiring and using a sign language (ASL-based) while learning the fundamental English skills like speech, reading and writing emphasized in the classroom. With her budding English skills, spontaneous ASL skills and established "gestural/oral sibling language", Rosa actually started becoming bilingually versatile and flexible very early in her life. During her first year at school she was already becoming bilingually experienced. She quickly acquired an early form of bilingualism - the sign language of the deaf peers at the residential school for the deaf and the gestural/oral sibling language at home (1.4). English did not become her useable language until she was in her adolescence. Until then she had two functional languages.

Rosa's experience with language acquisition exemplifies a human predisposition to acquire and use a language efficiently through socialization rather than through formal classroom lessons. It seems that some educators may tend to discredit the phenomenon of becoming lingually adaptable through the natural process.

Language-Independent Thinking

ASL and English seemed to be nonexistent in her thinking and dreams; however some speech was perceived in her dream. Her "dream language" seemed to be telephatic in nature. This seems consistent with her reading experience. Words seemed to become nonexistent when she was reading. "Mental imageries began to open up like movie scenes while I was

reading stories like Oliver and Jane Eyre: mental imageries developed vividly" (1:15). The spontaneity of switching between ASL and English is another example which may suggest that thinking is language independent.

Language Consciousness

As an adult Rosa describes her language as English-based rather than ASL-based. This self-description may have roots in her earlier exposure to the subliminal doctrine that English, not "the deaf language" is important. Rosa said, "I did not think that the deaf sign language was really a formal language. It did not have to be necessarily formal" (1.7). Her good attitude toward English language learning might be construed as a form of identity crisis linked to a belief that hearing peoples' language was superior. She could have been informed that she has always been lingually adaptable since her first year at school.

Table 5

First Level Thematic Analysis of Gofer's Protocol

Excerpts of Gofer's Protocol	Paraphrases	Themes
1. My mother and father did not know I was deaf until I was two; my grandmother suspected my deafness. Then mother had made decisions on how to communicate with me. Hold. Before that...(while) they were not aware that I was deaf, they were talking casually to me as if I could hear. I was smiling naively. Mother thought I understood.	1. Parent-child relationships developed on false assumptions in the first two years: parents thought he could hear; he acted as if he could hear.	1. Deafness unrecognized
2. When I was two mother found out about my deafness. She was wondering how to communicate with me. Someone mentioned to her that there was a correspondence program...in L.A....John Tracy Clinic. (Probably as guided by the program) then mother started to talk with me...ba...B-A-L-L. I had to say B A L L again, again, and again. Many times mother would say something; I would nod. I understood her? Not always.	2. The mother-child dyad somewhat changed as mother became more like a speech teacher; mother's new role seemed inconsistent with the child's immediate needs.	2. preschool repetitive speech drills
3. Sign language was not allowed at the residential school for the deaf in the United States.	3. He was sent to a residential school for the deaf for speech-based education; at the education; at the school signing was a taboo.	3. repression of ASL
4. Some students, who had been transferred from other schools, knew the sign language. I picked up a little bit of it from them, but we were still using	4. Gestures/signs were picked up through interactions with peers in early grades; semantics of signs recognized; struggle between inclination toward	4. signs acquired spontaneously through assocation with peers

gestures mostly. Examples L-I-E...it dawned on me, I remember the sign "L-I-E" somehow. I realized that it was a proper sign. At the deaf school, they signed, "D-U-M-B". I recognized it as a proper sign. I knew that we were not supposed to use those signs. The teachers and houseparents warned the students that they were not supposed to use signs.	signing and obligation toward school rules experienced in early grades.	
5. Often the deaf peers and I were using voiceless speech - mouthing without voicing. We would understand each other. Teachers or houseparents would tell us to use our voice.	5. In free socializing situations with oral-peers, speech production tended to become voiceless; guilt feelings were associated with his failure to obey school rules on use of voice.	5. adapting communication method to sensory characteristics
6. Today I am still voiceless when talking with you...no voice...habit. Even my brothers did not use their voice when they were talking to me! That was my habit.	6. The guilt feeling associated with "illegal" voiceless speech emerges from time to time even in adulthood.	6. oral vs sign (guilt)
7. There was a nearby deaf school in the same town but we were discouraged from becoming involved with the sign language students there.	7. Oral school policies discouraged exposure to the sign language of the deaf elsewhere.	7. sign language, a taboo
8. As I became older I understood. They did not want the sign language influence on our way of learning through the oral method.	8. As he grew older he learned and accepted reasons why he was not allowed to mix with signers.	8. repression of sign language rationalized
9. The older deaf at that school were telling each other what they were saying. I asked what they were saying. They would gesture to me, "You are too young for that". I was angry for not being allowed to know what they were talking about. I remember feeling that angry feeling.	9. As he grew up he struggled to gain access to the other students' conversation content (in oral English); access denied because of his youthfulness.	9. restricted socialization resented

11. Hearing people at home were talking. I actually could not understand. I would just nod and nod to let it go - to get over with it. I did not want to be bothered with it. I was young that time.	11. Nodding of feign understanding of the hearing people's conversation was easier than facing the difficulty in gaining access to it.	11. incomprehensible adult talk ignored
12. I remember...in the past I learned a language through comics. I remember having read thousands and thousands of comic books, piles of them. I had read through them whenever I had free time.	12. Enormous amount of time spent on reading comics in early years is still thought as time well spent.	12. comic book a meaningful activity
13. I had noticed that some comic language did not seem to be in proper English form. "I ain't", "Yeah". I realized that that was how hearing people used. Such language was noticed in formal books, novals, newspapers, etc. Never. "Why are they different?", I wondered. Slang. I had been picking up this language through comics. Really it was easy to learn the language through comics with the "dialogue clouds" of the comic characters.	13. The informal/colloquial English in the dialogue of the comics characters was believed to be similar to hearing people's dialogue; comics seemed to satisfy his curiosity about their language.	13. awareness of formal/informal English through reading
14. Old films had captioning. The silent movies with captioning. I could follow relationships between actions and captioning. Charlie Chaplin, Buster Keaton, and others.	14. Old motion pictures with intermittent captioning were enjoyed.	14. picture-word reading preceding word reading
16. When I was at home often father told me to get newspaper and find any article and said, "Please you read it to me". I hestitated but went along anyway. He encouraged me to read aloud something in sentences.	16. Father became teacher-like and encouraged the boy to read aloud to him newspaper articles and monitored his speech production quality fifteen minutes each day.	16. routine oral lessons with "didatic" father

When I was not pronouncing properly, he would ask me to repeat and make correct sounds until they were just good enough. I knew I was not perfect. Just good enough for him.		
17. Sometimes I could not understand what words meant and asked what those meant. Father would explain and I would understand. Every day. Just fifteen minutes.	17. Father was helpful in satisfying the child's need to know semantics of English words.	17. supportive father (oral)
18. I remember I did not see my father much. He worked all day. I was with mother. I was small playing around. When my father came home, he had a chance to know more about me; likewise I was getting to know more about him. Talking about sports through the newspapers.	18. Closer relationships developed with his stay-at-home-mother; when father was home he	18. supportive mother (oral)
19. He took me along. He introduced me to various people, being unafraid of my deafness. He would not hide my deafness. He would say, "This son is deaf. He could talk". I was trying (awkwardly) to talk.	19. Although the father accepted child's deafness, he insisted that the child could talk.	19. self-esteem affected by father's oral expectations
21. I remember at the deaf school teacher often said, "Your speech is good, good". Then as I tried to talk with hearing people I found myself in fairly precarious position. I sensed something; I knew I was not perfect with my speech, but it was better than nothing.	21. Teacher's praise for child's speech	21. teacher's praises, ambiguous feedback
22. I was able to speak with hearing people. I had noticed that some deaf people would refuse to talk (vocalize). I respect	22. Good feelings were associated with his having better speech skills than other deaf peers.	22. self-esteem linked with oral successes (oral success reinforcing)

differences among them.

23. I felt that I have been a little more fortunate; maybe it had something to do with my predispositions - I do not care whether I was wrong or not. So what? I would not be embarassed if I make mistakes in front of with hearing people. So what? That is fine. That is my attitude. With this I just keep on going.	23. He accepted/tolerated his limited speech skills with an indifferent attitude.	23. own oral skills realistically assessed
24. At the deaf school I took English course where the teacher required students to read and write book reports. How I was encouraged to do it made me love to read books. It seems that love for reading eventually developed. I do like to read books. I know I started reading at the deaf school where I was inspired to read books.	24. The school for the deaf is being given credit for his sustaining love for reading.	24. school credited for reading enthusiasm
25. Really I started my reading with comics - with pictures. I found comic reading fascinating. Eventually I read more and more with less and less reliance on pictures; eventually no pictures.	25. Comic reading was a valued activity during his growing up years.	25. comic book to novel book reading transition
26. My being the oldest of four children (two brothers and one sister) I often acted like "second father" to them. Remember, my father went to the war; the brothers looked up to me. When there were problems they would come to me. I could communicate with brothers; mostly with my brothers. I had good relationships with them.	26. Younger brothers looked up to him as a substitute for their father who was away for the war; he enjoyed communication and relationships with the younger brothers in pre-adolescent years.	26. supportive, rewarding sibling relationships
27. As they became older, brothers seemed to become more intelligent, smarter supposedly through their	27. He became apprehensive when his younger brothers seemed to be outpacing him as	27. self-esteem threatened by younger brother's intellectual growth

being able to hear. I felt I was limited.	being better informed and more intellectual.	
28. I had been going to the deaf school and returning home for breaks when I was between 3 and 13 years old. At the age of 13, I stayed home from then on; no more trips to the residential school.	28. A change from living much of each year at the residential school to living year round with all-hearing family when was around 13 posed new challenges for him.	28. physical integration in the all-hearing world
29. At the time he was 7, I was 9 or 10 when he was 7 or 8; anyway he was crying and upset. I asked him what was wrong. He explained that a neighbor boy made bad remarks about me, about my deafness and "stupidity". My brother was upset. It did not bother me; I went over and asked the fellow, "What's going on?" I hit him. He beat my brother; I beat him. He smartened up.	29. Pride associated with his being his young brother's protector.	29. a proud protector of younger brother
30. I came back home and told my brother that I finished beating him up. He felt good.	30. Personal role in settling other peers' dispute justified.	30. protection of sibling
32. As I was getting older, I went to a hearing school in the neighborhood; I was two grades above my brother; in my first year I was in grade 8 and he in grade 6 at the same school in a small town.	32. New experiences and challenges associated with going to high school with his younger brother.	32. testing the waters of the hearing world
33. Everyone in the town knew each other. Unlike on the streets in City D; you would not know who the people are. A big town. I was fortunate living in the small town; we knew each other. I was able to meet with other people; they knew who I was.	33. Enjoyed the security of the small town familiarity with everybody knowing everyday else.	33. the security of small-town feelings
34. Mother and Father would explain to them how to communicate with me -	34. The townspeople were educated about his deafness before he started	34. orientation of townspeople for him

talk slow so I could see their faces; lipread and understand. The town people learned how to communicate with the deaf.	to live in the area.	
35. I had one more year left at the deaf school and my best friends of the one class above ours as well as some of my classmates were graduating or going away. My class of 8 students would reduce in size as two or three of the students fall. There would be 4 or 5 left; if I had come back we would be in the top class anticipating less challenging experiences for us. I would have no one to share with or look up to. So I thought, "why not go for the hearing school for a change."	35. With the anticipated graduating off of the older deaf students at the residential school, he preferred new challenges in a hearing high school.	35. the social significance of accessible older peers outweighs anxiety
36. Incidentally the principal of the hearing school also had a son as old as I was; we were in the same class. Mother and I met with the principal and introduced me. I was placed in his son's class.	36. Readiness for local high school program included an introduction to the principal and his son who eventually became his classmate.	36. peer mentor for transition to hearing school
37. In one of two weeks' time I knew him better and better; he introduced me to the other classmates. They were surprised that I was deaf. We were trying to communicate; we did not do badly.	37. The innovativeness of his being deaf to the hearing high school students enhanced acceptance by his hearing peers.	37. pride associated with uniqueness of deafness
39. I came to the town in State A where they thought I could not do any sports. I joined and showed them that I was better than them, if not as good. For example: in baseball pick-up games, they competed to pick me first for their team. That made me feel I was part of them; I did not feel left out.	39. (see #37)	39. self-esteem associated with athletic ability

40. Comparing with what I had seen in other deaf people; they were picked last or left out, not needed. I was fortunate that I could proceed with confidence unafraid of anything.	40. Good feelings associated with his being picked first to be on all-hearing make-up teams.	40. self-esteem associated with athletic ability
41. My two year younger brother and I always had together through the summer months. Often I was aware of hearing people talking to each other; I felt left out, lost. Often during their social conversation, I asked my brother what they were talking about. He would say, "They were talking about sorts of things". Often I asked him what they were saying; he would keep me waiting until they were finished. He would then say, "Oh..." and gave me brief versions of their conversations. I knew that they were talking about much more things and that I had missed a lot but ...	41. New challenges faced during his latter adolescence when his younger brother "seemed to be drifting from him" which seemed to make it more difficult for him to gain acccess to the hearing peers.	41. feeling of exclusion - inaccessible hearing world
42. I remember sports in my High School years when I was 12 with my 10 year old brother. We were on the same team. Basketball, baseball. He told me about many things.	42. No problem in continuing with his brothers in competitive sports/ activities.	42. successes in the all-hearing world linked to athletic ability
43. Oh, when I was at the deaf school, I experienced speaking to hearing audience. They always had groups of visitors coming from universities or service clubs which had been donating funds to the school. They were coming to visit the school. The teachers always asked classes to come to the gymnasium or other large rooms where the visitors assembled. I was placed in front of audience to give an oral speech	43. A sense of specialness was associated with his being selected as one of the model speech students.	43. self-esteem associated with good speech skills

presentation, telling what I was doing. I spoke to the people starting when I was around 7, 8, 9 and 10 years old. I did that about 10 to 15 times a year.		
44. Oh. I first learned about sign language when I was in High School. I went to a track and field event and saw a group of deaf signers. I knew they were deaf. How did I know? I remember how I knew; I could recognize that they were deaf because of their signing. True....something was vague in my mind... something from the oral deaf school. I was aware... these deaf were using a sign language. I vaguely knew it.	44. As the hearing world became increasingly inaccessible, the deaf world became more appealing to him.	44. need to expand personal participation in the world
45. Anyway I was that group and I was curious. I went over with uncertain feelings. I made gestures, "I could not hear". Those in the group were surprised. I could not sign. I tried to understand them.	45. He was attrached to a group of unknown signing deaf peers.	45. drawn to deaf peers even though they signed
46. I noticed that one, two or three of them could mouth-talk. I could talk with them with gestures. We were talking.	46. He was pleased with the discovery that deaf signers also could vocally speak English.	46. establishing relationships with deaf signers
47. Evenutally, I went to the university here. On my free time - on a Saturday while knowing that there was a school for the deaf not far from the university I decided to look for it on the map. I walked from the university to the school.	47. He maintained contacts with signers.	47. furthering involvement with deaf signers
50. Later on I met Dr. K. at the university through one of the professors who asked me if I knew Dr. K. I said. "No"; he said he was deaf. I asked, "Really, where?" He showed where	50. Efforts were made to seek out a deaf adult while he was involved in the all-hearing community.	50. further involvement with deaf signers desired

his office was.

51. Then we all drove to meet D.A. Model II whose home was in the nearby area. Anyway when I saw them signing; I was lost. D. Peer One could talk, Dr. K could talk, too. I remember joining the conversation in which little signing was also involved.	51. In spite of his limited sign language skills, he sought further involvement with deaf individuals.	51. unlimited future possibilities with ASL foreseen
52. Then I was not exposed to signing until I had a full time job, working for one year. I played with hearing people in sports, baseball in the summer time; football in the fall and basketball, winter. But I was not with them everyday. Some evenings I went out to see movies or stayed home watching TV.	52. Sports activities mainly with hearing peers; socializing mainly with deaf peers.	52. sports with the hearing; other activities with the deaf
53. Deaf bowling...fine; I went there and met with some of the few deaf I had met before at the school. Anyway all of them were signing. I had to pick up some signs.	53. Further involvement in different deaf activities; more exposure to sign language, more enthusiastic.	53. ever-increasing involvement in the deaf world
55. He taught me signs; I was learning, but with the deaf at bowling once a week I was not really picking up sign language as fast as I was supposed to.	55. Access to the deaf people through sign language became more important and desirable.	55. learning sign language
57. My brother said he knew that one of the drivers in the front was a pretty good driver but the other deaf one was not good. He warned me. I was kind of awkward with the warning.	57. Caught in the middle between the values of the hearing community and his needs to develop relationships	57. awareness of split between hearing and deaf world
59. I had never met so many deaf people before. There were meetings; I was picking up more and more sign language. D. Peer	59. Impressed with the large number of deaf individuals in a major event, he became determined to learn more of	59. enthusiastic sign language learner-deaf socialization

One was sitting next to me. When I could not understand certain signs I asked him. What "entry"? I tried to catch different signs. I picked up a little bit.	sign language.	
60. In the World Series of the Deaf, for the first time in my life I was in the deaf world with no hearing people around. At that time, I experienced a big break through. I began to pick up sign language more spontaneously. I did not have to ask others what new signs meant. I could figure out what they were in context.	60. Total immersion in all-deaf world, total exposure to different deaf languages and cultural values of the world in the World Games of the Deaf.	60. sign learning becoming spontaneous as he identifies with deaf
61. Not before. Before that the signs I had picked up just faded out again and again. This time I was picking up signs very fast. I was there with the athletes in the training and games for three weeks. After having returned home, I could pick up any new signs easily.	61. In crossing the Rubicon, he no longer had to rely on others' help in learning sign semantics; instead he could determine them in context.	61. sign learning easier in a deaf context
64. I lived in City V residential school for the deaf dormitory. Some of their signs were different. Different province, different area, different signs. I picked up more signs.	64. Enjoyed involvement with deaf students at a residential school for the deaf while being a student at the University of Province X.	64. the joy of socializing with deaf
65. I noticed jealousy in the fellow hearing houseparents. Deaf children disliked the hearing houseparents. When I was there, the deaf children came to talk with me. Hearing houseparents did not like that.	65. His pride in being deaf is supported with the desire of younger deaf individuals to identify with him; a testimony to deaf-with-deaf identification, an example of role modelling principle.	65. deaf children identify with deaf adults
66. The complained to the principal. He called me to his office and asked how things were. I casually	66. The deaf/deaf attraction seems stronger than that of deaf/hearing relationships.	66. deaf children identify with deaf adults

said it was good. He warned me to be careful with the other houseparents. They were perturbed with the fact that the children were coming to me. They suggested that I was "looking for trouble". I was puzzled.		
68. By the time I returned home for my job, I had already acquired sign language skills.	68. Eventually he became a sign language instructor.	68. acquisition of signing skills
70. In spoken language some of the words are "waste" but you have to say them; words like "the" are not really that important. "Is" or "Are" are not important to the deaf with their signing. Today I understand and feel comfortable with the sign language.	70. Functions of ASL and English perceived as essentially the same even though they have different linguisitcs.	70. awareness of difference between ASL and English, feeling comfortable
71. In retrospect I realized that I should learned sign language long time ago. I grew up as an oral deaf.	71. He felt he was cheated for not having been allowed to acquire sign language when he was young.	71. regret that opportunity to grow
72. If I had learned sign language when I was younger, would it have made any difference? I am not sure. Why? My intelligence would have been consistent; this would mean that learning would occur in a different way.	72. Feeling cheated; yes; however he sensed that there is something in his make-up that remains consistent regardless of environmental factors.	72. humans should not be restricted to a particular language
73. Even if I was explaining to the hearing, I would not be using full grammar like "This is a ...". I would go direct to these points quickly. When I am explaining problems in mathematics, I do not have to think in accurate English.	73. Thinking is perceived as neither English nor ASL dependent; it is compared to a very efficient problem solving process.	73. thinking not restricted by ASL
74. Sometimes as a teacher, I found it hard to convert deaf signing to	74. ASL-English translations are either difficult or easy depending	74. bilingual translation ASL-English sometimes difficult

correct English word order. I understand the concept as signed by the students but to put it in proper English word order, I sometimes found it frustrating.	on the context of the original information unit.	
75. Sometimes I had to ask them to sign what they meant in such improper English structure in order to understand them better. They would sign for me to translate into English and gave them back to them in English. Possible. It could be done. Sometimes I would ask them for more signs before getting the clear picture.	75. Accuracy of translation is related to the quality of comprehension of the context regardless how good one's language is.	75. Translation problems
76. I had some frustration with hearing jokes. Even though I know English language, I sometimes could not "catch" hearing jokes. Enjoying their jokes requires familiarity with puns or sounds. However I could understand many of the hearing jokes. Deaf jokes very different from hearing jokes. I readily appreciated deaf jokes. I was really impressed with deaf jokes; I find them fascinating.	76. Translation from one language to another is possible as long as the context remains comprehensible.	76. natural affinity for deaf language humor
77. I noticed that hearing individuals would have trouble understanding deaf jokes which have been translated into spoken form. They would see nothing funny in some of them. They would ask, "what's that?' Really hearing and deaf jokes are different.	77. (see #76)	77. translation problems
78. I feel very comfortable with the sign language and I know there is room for my improvement with it.	78. Confidence with his future with the sign language.	78. bright future seem with signing
79. I do not worry about that but I know I am not	79. Conceded that he had limited future with his	79. limited speech skills

perfect with speech skills which are limited. My speech skills never improved. I have reached my limit in improving my speech skills.	speech skills.	
81. I feel I am more comfortable with sign language. I am not really comfortable with speech skills. For example, people asked me to talk to them; I would not feel comfortable with doing it. Signing to deaf audience is easy and natural for me.	81. Comfortable with sign language usage; use of interpreter is preferred if he needs to speak in front of hearing audience.	81. greater confidence in signing than speaking
83. Some of them people told me that they were too lazy to listen carefully, but I have been noticing that hearing strangers have not trouble speaking to other strangers. They seem to understand each other easily. I do not speak with strangers without experiencing problems. I have no problems talking to the people who know me. Often after my having talked, some people would come to me and say, "your speech has improved immensely". I was puzzled. I am sure that they had improved their listening skills rather than me having improved my speaking skills. My speech improved??? It could not be. It sounds like the same old stories. "Your speech improved". How???	83. Hearing people's stated positive feedback (praises) for his speech quality did not seem to be consistent with their feedback perceived in the real situation.	83. feedback and self-perception inconsistent - a problem of authenticity
84. I remember when I was in the hearing High School, I was involved with a youth group through the church. At that time I was 15, 16 or 17 I did not really talk with hearing people much. Really it was one-to-one conversation. In a large group I did not talk much. I would try to listen	84. Accessibility to hearing persons became increasingly difficult as they became older.	84. all-hearing world difficult to access

and ask what they were talking about.		
85. After the oral presentation to the adult audience, a person came to me saying, "I understood every word you had said" and "Your speech has improved a lot". I was puzzled. In looking back, I realized that the person was accustomed to my speech.	85. People's stated feedback for the quality of his speech presentation was taken with a grain of salt.	85. empty praises taken with grain of salt (inauthentic reinforcement)
86. You know when you talk to an audience, you try your best to make sure they could understand you carefully.	86. When he speaks to hearing audience, he must be conscious with how he vocalizes.	86. self-conscious when speaking to audience
87. I have some kind of fear in speaking to people, yes. With sign language, that is nothing. I prefer signing. If a hearing person can interpret, I would prefer have him/her interpret my signed messages for hearing people. I prefer this way. If there is no interpreter, I would reluctantly speak vocally; I would try.	87. During adulthood he hesitates when speaking to hearing people; more self-conscious; greater preference for use of interpreter.	87. more confidence with signing than speaking
89. But I am not as confident with expressing myself in essay writing for tests for English courses at the university English ...body, outline...I am never good with those things. I do not know why. It seems that there was a mental block. Everything in the mind seems blocked. Trying to put ideas in words... my mind seems to be going the wrong way. My grammar is good but I am never good at writing story compositions. I do not know why.	89. Ability to write in formal English is somewhat limited by something like mental block.	89. lacking confidence in formal English writing
90. I can read and understand and tell if the content is good or not.	90. He has confident with his ability to read.	90. a confident reader

96. I remember frustrations. Shakespeare...MacBeth lines too English. I could not understand. Teacher tried to explain. I began to understand; something to do with sounds and rhythms. Words were replaced with others to make it sound right. Sometimes I find it frustrating.	96. Frustrated with difficulty to benefit from English courses in classes with hearing students in which much of language-related semantics are dependent upon spoken language pragmatics.	96. at a disadvantage with sound derivatives
Supplementary Excerpts	Supplementary Paraphrases	Supplementary Themes
1e. I remember some frustrations but not clearly...somewhat vague about how I felt, but I will try to look way back to my earlier times and recall them. Probably I felt some kind of anger when the teacher made me repeat any times.	1e. Childhood and adolescent frustrations are forgotten but recallable; angry feelings associated with the demanding speech teacher.	1e. frustration - rote learning
2e. That would mean I was about 2 or 3 years old or maybe a little older. I probably nodded to get over with it but when I got a little older I would get pretty well everything what mother had said as she spoke more like a speech teacher where one could follow her easily. But when I nodded I probably got redhanded when mother asked me questions during a conversation; she would ask me questions before I realized that it was my turn to answer them	2e. Nodding to get out of the persisting demands of adults was not easy during adolescence as it was during childhood; language related accountability became more evident as he became older.	2e. difficult to "fake it" (understanding in hearing world)
3e. I really did not notice that those students were actually signing because I thought they were gesturing which made me think that those gestures were not signs until later years.	3e. During his childhood he recalled being able to tell differences between rudimentary gestures and formal signs.	3e. signing and gesturing distinguishable even to the oral deaf
5e. Yes, we often asked about those people of the other school; our superiors	5e. He was given false information to discourage his desire to make contact	5e. language segregation, freedom restricted, authoritarianism

would tell us that they could not come because of reasons like they were too busy or had no time. They would make excuses which made us wonder if the students there were not interested in making friends with us. In the years beyond our youth times I had met some of the former students and found out that they had the same feelings. I had a feeling that the administration of both schools just did not want to get messed up with the different philosophies.	with the signing deaf peers in one of the area schools.	
6e. Times have changed a lot since those days and my feelings about those situations are mixed. I would be angry or accept the past with understanding.	6e. Childhood feeling modified with understanding during adulthood.	6e. time heals angry feelings (reconciliation)
7e. Man, it is hard to elaborate on them as I must have read millions of them. While I was reading comics in my earlier days I did not follow the dialogue but while at the school I had learned some language rules. With that new language awareness I started to follow the dialogue and become more interested and deeply involved in story plots/lines.	7e. Comics reading during young years remembered and valued also as an indirect means to gain access to the language of the hearing people.	7e. meaningful reading activity
8e. Whew. Let's see...I was probably six, seven or even older depending on which comics. Superman and historical stories have very different levels of dialogue so I am not too sure when I started reading words.	8e. (see #7e)	8e. meaningful reading activity
9e. Well, at first I think I was kind of shy when asked to read aloud to him (father) but he made me feel at ease. It just	9e. Child adjusting to the teacher-role assumed by father who also demonstrated fatherly love and care.	9e. adjusting to father's expectations

became a habit and I start to have more confidence with my dad's encouragement and help with my speech skills.		
11e. I felt somewhat a little low. But as soon as I was aware that my deafness would be part of me for the rest of life, I accepted it. I knew that I had missed a lot of what had been going on round me; so...so what?	11e. Adjustments during adolescence included acceptance of his own deafness and the limited access to the hearing world.	11e. acceptance of limited access to the hearing world
12e. I think I did not mind my deafness and I wanted to make friends with those deaf people even though they were using a different mode of communication. They would be signing and I speaking. That did not bother me because all I thought of at that time was that we were deaf period. So I just walked over and told them that I was deaf; all of a sudden they surrounded me trying to communicate with me. It was a great feeling to be with them.	12e. Eventually he came to full terms with his own deafness and identified with the deaf peers.	12e. meaningful relationships with deaf
13e. I guess my signing is pretty good but often I feel a need for more exposure and greater depth in the sign language and I have always been interested in languages. I had studied several foreign languages: German, Russian, French and ASL as well as English. If I had been younger, I would probably have chosen to study linguistics but...time flies and I have trouble keeping up with it.	13e. Enjoyed his newly acquired/learned sign language; feeling that the world has opened wide; fascinated by languages of the world with interest in learning more about them; having trouble getting on with it - learning all about the different languages.	13e. enhanced interest in linguistics

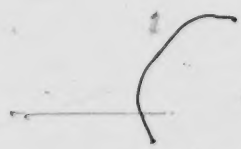


Table 6

Thematic Clustering of Gofer's Protocols

Clusters of Themes	Descriptions
1. Interdependence of Communication and Relationships: (9, 35)	1. By nature he seeks meaningful communication and relationship with deaf and hearing individuals, a human predisposition to seek to become involved in the world.
2. Modified Parent and Child Relationships: (17, 18, 9e)	2. Even though his parents were supportive, they might have unrealistic expectations for him to perform like hearing persons - on their terms. Parents encouraged Gofer to adopt the values of the hearing world like the spoken language and socialization with hearing people and oral deaf.
3. Visually-Based Orientation: (4, 5, 6, 55, 60, 64, 70, 78, 3e)	3. His participation within his world-context is visually based meaning that he depends on the visual aspects of the oral language with or without help of gestures or signs.
4. Feedback on Speech Efforts: (21, 83, 85, 10e)	4. Inauthentic feedback on his speech quality rejected as inconsistent with the real feedback from strangers.
5. English Appreciation Attributable to Reading: (12, 13, 14, 24, 25, 7e, 8e)	5. Comic book reading followed by novel book reading seemed to anchor the tangible aspect of English language (printed); positive feelings associated with reading experiences.
6. Siblings, Significant Link to Hearing World: (26, 29, 30, 32)	6. Younger sibling functioned "brother's custodian" as they were active in involving Gofer as a participant in hearing peer activities, particularly communication network.
7. Realistic Self-Assessment: (19, 22, 23, 40, 43, 12e)	7. He did not wait for the world to come to him. He recognized his limited access to the hearing peer world and quickly adjusted to resume his level of participation in the world through involvement iwth deaf persons.
8. Accessible/Inaccessible Worlds: (11, 33, 34, 36, 38, 39, 84)	8. With his speech skills and athletic ability in combination with the support of his family, he experienced some success in the hearing world. As he became older he chose to become involved in deaf world.
9. Changes During Adolescence: (27, 32, 41, 57, 11e, 12e)	9. As his younger sibling became adolescent himself, Gofer sensed a gradual restriction on his access to the hearing peers. He found new access to the Deaf World.

10. Affinity with Deaf Peers/ Adults: (44, 45, 46, 47, 50, 52, 53, 59, 65, 66)	10. He crossed the Rubicon and increased his involvement in the Deaf World.
11. ASL, the Pillar of Bilingualism: (61, 74, 75, 76, 77)	11. Although he enjoyed the flexibility as a bilingual, he has more confidence with ASL than spoken English.
12. Language Choice, Confidence Linked: (79, 81, 87, 90, 13e)	12. He accepted the fact that he had limited speech skills and saw a future with the sign language he was learning in late adolescence.
13. Sign Language Suppression, Contradevelopmental: (7, 8, 5e)	13. He was always curious about the sign language. He was prevented from acquiring and using it until he was in early adulthood.
14. Subjecting to "Didactic" Adults (Parents Included): (2, 1e, 2e, 16)	14. His parents became speech teacher-like and actively encouraged him to learn speech skills.
15. Thinking, not Necessarily Language Dependent: (70, 73, 74)	15. His thinking process is perceived as symbolic language independent; it is described as an efficient problem solving process.
16. Prior Schooling: (1e, 5e)	16. In retrospect he felt he should have been allowed to acquire and use the sign language.

Note. Numbers in the parentheses refer to the number of the themes in Table 5.

Table 7

Higher Level Themes and Description

Themes	Description
1. Semiaccessible Hearing World: (7, 8, 9, 11)	1. The world is either accessible or inaccessible on the nature of sensory functionality. The world of the hearing must be perceived differently in order to gain access to it.
2. Support System: (2, 6)	2. His parents and siblings at home and deaf peers at the residential school provided significant support.
3. Self-Concept: (7, 12)	3. He felt that his self-esteem was threatened by his younger brother's getting educated more quickly than he during his adolescence.
4. Selective Socialization, Language Related: (1, 3, 10)	4. Even though he was groomed to become a successful oral deaf ault, he determined that it was not good enough and went on to learn ASL and became active in Deaf Community.
5. Bilingualism: (11)	5. In the early stages of ASL learning he crossed the Rubicon and began to pick up new signs and syntax spontaneously rather than asking for help.
6. Language and Cognition: (15)	6. Thinking is described as symbolic language independent.
7. Modified Language/Relationships: (4, 13, 14)	7. Gofer and his siblings adapted to the former's deafness and used voiceless oral English; this exemplifies a human predisposition to adjust to maintain satisfactory interpersonal relationships.
8. Empty Feedback: (4)	8. Fake feedback was soon rejected as meaningless.
9. Reading Valued: (5)	9. English was appreciated much as he was able to read and enjoy reading comic books and novels.

Note. Numbers in the parentheses refer to the numbers of the themes in Table 6.

Table 8

Common Themes and Descriptions

Themes	Descriptions
1. The Power of Individuality (3)	1. As indicated in Gofer's experience-based data, no external forces may displace the natural inclination the individual has to exist according to the peculiarity of her/his personality and her/his world.
2. Sensory-Based Selective Socialization (1)	2. The social, language and cultural aspects of the deaf are visually oriented; hence the deaf world does exist as distinctly different from the hearing world. Gofer was encouraged to become involved in the hearing world without consideration for his visual orientation.
3. Bilingualism (4, 5)	3. Gofer was encouraged to develop and use English language and its methods but he chose to learn ASL and use it as one of his basic social languages; incidentally, he began to reap benefits of bilingualism.
4. Language and Thinking (6)	4. Gofer perceived that neither ASL signs nor English words exist in his thinking porcesses which means that his thinking is perceived as language-independent.
5. Value Acceptance/Rejection (4, 8)	5. Values that are not consistent with personal orientation and abilities are eventually displaced with those that are. The crucial time for value displacement seems to be during adolescence and early adulthood. "Pseudovalues" are displaced with naturally evolved values.
6. Supportive Network (2, 4)	6. Significant siblings bridged the gap between Gofer and the hearing world until they became adolescents themselves. During his adolescence, adults seemed to be becoming less prominent in his world-view. Peers became more important.
7. Language and Self-Concept (7)	7. Gofer felt that his speech skills did not develop as far as his reading and ASL skills.

Note. Numbers in the parentheses refer to the numbers of the themes in Table 7.

Synthesis of Gofer's Lived-Experience

Introduction

This synthesis is based upon reflections and interpretations on Gofer's lived-experience as analyzed through Tables 5 to 8. The headings in the synthesis reflect the characteristics of the paragraphs rather than corresponding to the themes presented in the tables.

Supportive but Unprepared Parents

Gofer's parents were unprepared for his deafness. Their initial parent/child relationships were being built on the basis of "pseudocommunication". Over the first two years of his life they talked to him as if he could hear without realizing that he was paying attention to the visual cues of their efforts. Gofer enjoyed good affective relationships with them as they provided adequate physical and emotional care. This kind of care was apparently more meaningful to him, as a toddler, than the more abstract language-based care which would be meaningful in later years. Gofer's orientation to language and socialization apparently started and stayed with his interpretations of the visual aspects of the world of the hearing. Perhaps his good speech skills in his adulthood can be attributed to the visual acuity acquired during his early childhood.

Parents Becoming Teacher-Like

After the discovery of his deafness when he was two, a significant

change in the structure of the parent/child relationships occurred. His parents related to him in a didactic way (teacher-like). His mother started teaching and encouraging him to learn fundamental speech sounds and English words. He recalled being restless and impatient with the persisting and repetitive speech drills. He discovered that nodding to feign comprehension and cooperation helped in alleviating the pressure of her teaching (5.2). As Gofer became older his father encouraged him to read newspaper articles aloud and coached his speech performance. It may be difficult to describe his first years of relationships with his parents. It could be that he correctly interpreted the visual cues of the parents' nutritive care without having to comprehend their stated words in his first two years. After the discovery of his deafness, it may be possible that the quality of their care for him changed as it seems that their acceptance of his deafness depended upon his speech skill development.

Self-Esteem

The father would not hide Gofer's deafness from the former's friends. His father had said, "This son is deaf. He could talk" (5.19). One may wonder if the father really accepted Gofer's deafness or not. His father encouraged him to read and talk; he would tolerate his "good-enough" speech quality (5.16).

As Gofer became older he enjoyed being able to talk even though he doubted that his speech was as good as that of hearing people. He just kept up with his speech and lipreading skills even though he was somewhat

affected by hearing peoples' opinions on his speech quality (5.83). He reported: "I sensed something; I knew I was not perfect with my speech, but it was better than nothing" (5.21). Gofer probably learned that his deafness was wrong and that any efforts on his part to compensate for it would be desirable to his parents. According to his data, his self-esteem was affected by the diminishing access to peers and this became more apparent during his adolescence (5.41).

Personal-School Value Reassessment

At the residential school for the deaf all students were encouraged to learn to speak and lipread. Signing was not allowed there. The philosophy of communication at the school was consistent with that at home; hence, throughout his growing up years Gofer had almost no exposure to the sign language. Teachers at the school and parents at home worked as a team in keeping Gofer oriented to the language and values of the hearing world. Gofer's main task was to measure up to his parents' and teachers' expectations.

Gofer's first exposure to the sign language of the deaf was through some of the "closet signers" in his first years at the oral school (5.4). He recognized the signing but did not really realize that it represented a real sign language. He recalled, "I thought they were gesturing which made me think that those gestures were not signs until later years" (5.3e). The school authorities at his school managed to squelch his curiosity about signing among students at the other school. He remembered the school superiors'

manipulations in keeping him oral oriented; he said, "They would make excuses which made us wonder if the students there (at the other school) were not interested in making friends with us" (5.5e). Gofer went on and became one of the model students with good speech skills. This success story shows that the home and school efforts could be coordinated to make a successful oralist out of a born deaf person - up to a point. However, his naturally acquired values eventually replaced the school-imposed values (e.g., he went on acquiring sign language in spite of the years of spoken English-only emphasis).

Disorientation with School Values

Until Gofer was in his later adolescence he enjoyed his relationships with oral deaf peers at the school and hearing peers at home partially because of his speech skills. As he became older he noticed that only those who were familiar with his speech praised him. One of the hearing adults came toward him and said, "I understood every word you had said. Your speech has improved a lot" (5.85). Gofer knew there was something wrong, as hearing strangers did not compliment him the same way. During his childhood Gofer did not seem to mind the inconsistent feedback on his speech quality but as an adolescent he was bothered with the fact that his speech was not normal enough to use with just any stranger.

Children and adolescents have different priorities; language and communication quality means more to adolescents than to younger children. Teachers should be aware of the individuals' changing priorities as they grow

older. This means that teachers should treat adolescents differently from the way they treat children. They should be aware that deaf adolescents need honest assessments on the quality of their spoken English more than hearing counterparts do. Why did the teachers not give Gofer an honest assessment of his speech quality rather than letting him find it out from strangers? Did they praise with the anticipation that he would remain motivated to continue with his speech skill development after he left school?

Significant Siblings

During their preadolescence Gofer enjoyed relationships with hearing peers with the help of his younger siblings who were also his interpreters. After Gofer's transfer from the distant residential school to his home town high school he began taking classes in a local regular school and taking part in school sports with his siblings. His intergration into the hearing world was successful until his younger siblings became adolescents themselves. Gofer made this statement, "Often I was aware of hearing people talking to each other; I felt left out, lost" (5.41). Gofer found it harder and harder to maintain relationships with his hearing peers as the siblings seemed to be more interested in their own affairs. They were no longer reliable as interpreters. As preadolescents became adolescents, their world must expand and they must also expand their network of social contacts. Gofer and his younger siblings were involved in different activities at the school; however Gofer noticed a change in the siblings' behavior as they became adolescents themselves. The younger siblings were not as helpful in keeping Gofer

involved in the activities of the other hearing peers.

Sensory-Based Selective Socialization

His social relationships changed as he grew up. He started with all-hearing family members in his preschool years and then attended school with oral deaf peers unilt he was in his early teens. In his adolescence he returned to live full time with his all-hearing family and attend all-hearing high school. When he was in his later adolescence and early twenties, he re-included deaf peers in his network of social contacts. He spotted a group of deaf signers and introduced himself as a non-signing deaf oralist (5.45). (That decision might coincide with his realization that there would be a limited future for him in the world of the hearing.) Soon he was accepted by the group and within the next few years he knew the sign language well enough to teach it to hearing people. One may conclude that no matter how much energy and work have been expended to keep a deaf person oriented toward values of the hearing world, the reality of inaccessibility to the hearing world raises its ugly head. The hearing world becomes inaccessible and the deaf world becomes more appealing (5.47). Like his brother, Gofer was meeting his need to grow and expand through expanding his network of meaningful friends.

Bilingual Versatility

Gofer had very little trouble switching between English and ASL. He experienced some difficulty in interpreting the content of one language into

another. The impact of certain jokes in the original context is sometimes lost through interpretation between spoken and signed langauges. Gofer said, "Even though I know the English language, I sometimes could not 'catch' hearing jokes" (5.76). This difficulty in interpeting jokes does not necessarily suggest limited bilingual versatility but a lack of access to the cultural aspect to the hearing world. Some jokes are best kept in their original context with special effects manifested through mannerisms and the timing and style of joke telling in that particular language. Gofer enjoyed novel books and newspapers and experienced no difficulty in discussing the selections in ASL.

Thinking and Language

He compared his thinking process with a mathematical problem solving process which may be construed to mean that thinking is essentially language-independent. He did not seem to recall involvement of words or signs to facilitate his thinking. To him, thinking proceeded as an efficient problem solving process.

Table 9

First Level Thematic Analysis of Ella's Protocol

Excerpts of Ella's Protocol	Paraphrases	Themes
3. I remember signing "milk" when I was one or two...at one time I was sick with measles ... my parents ... Mother did not know what to do. They took me to the hospital to let them watch me. They took me to the hospital to let them watch me. Mother did not know what to do with my illness; she was afraid that measles might cause blindness. (It was considered a terrible disease those days).	3. Sense of sight valued; blindness unthinkable; first sign made at age of 1 or 2 recalled.	3. visually based language
4. After having been taken to the hospital, I had not seen parents for almost two or three weeks. After I was brought home, I was deliberately quiet and withdrawn; I noticed that all of them in the family did not mouth-talk; instead they were signing and I was puzzled. Mother signed to me, "Do you want to eat?" I thought to myself, "That's communication". I realized that the nurses at the hospital could not really communicate with me.	4. Being removed from the accessible atmosphere at home and placed in a restrictive environment in the hospital ward was recalled as a traumatic experience.	4. restricted environment and communication deprivation
5. I was nodding, "hungry, hungry"; Mother was very surprised with tears that I finally signed, "milk" and "food".	5. Child's first sign or word with mother is still vividly remembered.	5. budding interactive communication with mother
6. Actually my first contact with hearing on the bus; I saw them talking. I thought nothing of it as I thought there were deaf and hearing worlds and that they were separate.	6. To the deaf child both, the inaccessible world and accessible deaf world are real.	6. accessible deaf and inaccessible hearing worlds

Parents never taught me how to write English, never. We signed to each other. I went to the Deaf Club every Friday where I saw the deaf people signing among themselves.		
7. When I was two, three, four, five years old as well as all my growing up years, parents brought me back and forth between Deaf Club and home. I went to the Deaf Club and socialized with people there. I mixed with several hearing children. I did not really talk with the children who could not sign; I found hearing children who had deaf parents.	7. Peers with similar sign language background are preferred socializing partners.	7. selective socializing, language-based
8. Mother had a friend who was her former teacher at the school for the deaf; she said I needed to learn speech and that it was important that I learn it. The teacher stressed that speech was important. Mother and Father were not sure. Those days deaf people did not realize that their own communication throught ASL was real; the parents were convinced by the teacher and I was enrolled in a private oral school.	8. The teacher in midst of her family was perceived as the one who knew what language and communication method were right for the child; her functional family sign language "did not count" to the teacher.	8. teacher, authority of language
9. The teacher struggled with me, encouraging me to learn to speak; then she gave up and let me play with toys. I remember the box...putting the beads together when I was three or four years old.	9. Free play break was remembered as a relief from the demeaning experience with her very first classroom teacher who stressed speech lessons.	9. free play, child's priority
10. Teacher was holding my cheeks and nose all the time; I was looking at her and wondering, "Why speech?" I tried to see connections between our signing at home and	10. The speech teacher's persistent efforts seemed incompatible with the child's priorities and language experiences.	10. speech teachers not understood

teacher's efforts to teach me speech at school. We signed spontaneously and naturally at home. Anyway I went along with the teacher, learning speech skills.		
11. Years later, I was taken to a meeting at Kiwanis or Lions Club probably for their fund raising purposes. Many people came. I was taken there to show that deaf children needed hearing aids and speech. I sat on the stage in front of crowd....I still have the newspaper clipping. I remember the crowd and my being asked to do speech with the nose touching in front of the audience. People applauded. Newspaper people took pictures of me. I was 3 and 4 that time. I became restless and got off the stage; I walked around looking for chairs to sit on. They called me "Goldilocks" as I was trying the different chairs. Actually I did not understand what was going on.	11. Performance in front of adult audience followed by applause perceived as irrelevant and meaningless to child.	11. performing for adults
13. They did not invite my parents to the meeting but the former let me go. Hearing adults brought me there. I remember the picture takings. I was alone with the social worker who was also a friend. I was nodding to that audience in that event. I was alone.	13. She perceived that the professionals could override the dignity of her parents' role; they seemed to be able to take the child anywhere without explaining plans to the parents.	13. overriding powers of teachers
14. I went there. Pictures taken and then I was taken back home; my parents did not know what went on there. They never found out from them. They just let me go as they thought it was proper to be	14. Child perceived that her own parents had little say in the professionals' plans for her.	14. child's perception of limited adult role

courteous. They respected the teacher, believing that she knew best. Parents later saw my picture in the newspaper and asked me what was it for.		
15. The day school had a mixture of hearing and deaf students. There were three or four self-contained classrooms; I went to see or two of them. That was it. I recall being taken downtown.	15. Early social experience in classroom include placement with hearing peers.	15. insensitivity to social aspects of deafness
16. That teacher was also the former teacher of many deaf people of the area. She was still teaching there; she was going to teach me. She was teaching, teaching me all day - speech, speech. I remember taking speech lessons all morning. I had to sit side by side with classmates.	16. The classroom activities were essentially teacher-centered; the students learned the importance of the teacher as an authority.	16. teacher as the language authority
17. The rest of us had to wait; we were not allowed to sign or to do work; we were not allowed to draw pictures. We had to wait for a long time waiting for our turn. The teacher encouraged me to pronounce words.	17. Complete obedience and cooperation with the speech teacher precluded child's inclinations to play or sign-talk.	17. social conformity to hearing norms inhibits communication
18. I did not know how to pronounce words; I did not care whether I had said the words right or not. The teacher would say, "Right! Right!" She then moved on to the students on my right. It was going on and on.	18. The name of the game was to do what the teacher says and get feedback from her.	18. source of power (dependency, conformity)
19. I complained to my parents. My mother was hurt. I knew that both of them attended the school for the deaf. They were discussing what to do. They knew that students living in certain areas of City A had to go to the	19. Child-parent relationship was experienced as child-centered as her parents cared about her immediate needs.	19. supportive parents

particular schools and that those living outside the city would have to go to the residential school in City B. Father struggled, trying to figure things out and recalled that one girl at the school had given up, quitting school. Those days students of Province A were not allowed to quit school. Negotiations to let me replace her and go to the school were going on; finally I was allowed to go there. I was prepared to separate from my family to go to the City B School for the Deaf.		
20. At the day school for two years speech was stressed. I remember that the children there could not communicate well; some could not communicate at all. They used signs; yes, but most of the signs were made up. It did not seem right. I had to teach them the signs the older adults had been using. I taught; my father being deaf might be the reason. I corrected their home-made gestures and showed them right signs. I would correct them, "No, no, not this nor that. Sign H O M E rather than F A R, F A R-A W A Y", not "M O T H E R, F A R, F A R-A W A Y", just sign "M O T H E R".	20. With her superior sign language skills, the child noticed inadequacies in peers' skills and became a child-teacher.	20. self-esteem, social interaction
21. The older people at the deaf Lutheran Church were just like others; they signed good signs, but the information they shared among themselves seemed unvarying. For example, I had noticed they were talking about the same topics all year. Their conversation did not vary, they talked about clothes and home problems. I got	21. Deaf adults at the Deaf Church were accessible as they and the child used the same language; the content of the deaf adults were assessable.	21. approachable/ accessible deaf adults

out to go to City B when I was around 7 years old.		
22. Bored! Yes, I was bored. Why? My parents were signing; I could involve myself with them. When I was back there at the church, I noticed that group was obviously different from my parents. I told Mother that they were talking about the same things; she just encouraged me to "keep quiet about it".	22. Parents were responding to the child's observations and complaints.	22. supportive parents
23. I was taken to the City B School for the Deaf without knowing that it would also be an oral school. I was just told that the school was far away and that the children would be different and better than the others at the day program. I was convinced. I did not realize I was going to be separated from my parents. I was crying and arriving at the school. At the school they expected that all the new children entering the school would not know how to sign. I would not sign for one week as I was observing as a new student there.	23. The child needs to reassess her relationships with peers and adults after her placement at the distance residential school.	23. adjusting to new place and people
24. Mr. D.A. Model (deaf adult role model) was signing to the students. I was observing without saying anything; all the week I was holding myself back. Finally I signed that I wanted to go home.	24. The deaf staff member was perceived as approachable, accessible and helpful like a guiding "lighthouse beacon".	24. contact with deaf mentor
25. They were surprised that I could sign while any children my age, around seven, could not. They thought I came to the school to learn signs. Sometime later they said that I could sign because my parents were deaf. Eventually we were signing.	25. Self-concept reaffirmed as her own signing skills were recognized and appreciated.	25. self-concept language-linked

26. In the classroom I was surprised...speech again. I was relieved that I could sign outside the classroom. In the classroom we had to practise our speech skills. We had speech only one hour a day. I expected lessons in science and mathematics but...speech again. I found it frustrating so I approached Mr. D.A. Model for help. He was only the deaf staff member that time. He explained and helped me. I had been approaching him the following ten years.	26. Disorientated with the emphasis of speech; deaf mentor restored sense of meaning.	26. over-emphasis on speech in classroom
27. I remember one time when I was young. While I was sitting, the nurse brought me a plate of food and told me to go ahead and eat. After I was finished, she picked up the tray and took me to the bathroom. I sat and I came back. The nurse left me alone. I saw her talking, holding and comforting other children; I was just staying in bed and observing very quietly. They patted on my cheek, talked to me...I just looked. She suggested me to drink or eat. She was talking; I just looked without really understanding her.	27. During todderhood nurses were perceived as distant and inaccessible even though they met the child's basic physical needs; child experienced a sense of emptiness and shallowness.	27. segregation in all-hearing environment
28. I had graduated from my school with some disgusting memories; the school split students into two groups, one manual group and the other one an oral group. I was placed in the manual class.	28. She recalled being treated unfairly as she was one of the "manual" students in her class; the oralists were treated special.	28. self-esteem language-linked
29. In grades 3 and 4, there were two main groups. One group had slow learners; I was placed with this slow group because I could not hear and speak. There was	29. (see #28)	29. self-esteem language-linked

another class, this better class called Group A; my class was called Group B. Visitors came to observe Group A students in action; they encouraged them to use hearing aids.		
30. Speech, speech; I was complaining, "why speech, speech?" My father is deaf. Why must I learn speech? I asked other students if they had used speech at home. Since many of them had hearing parents; therefore they spoke more than signing at home. Some of them had deaf sisters and brothers could sign some. Some of them fingerspelled. Their parents did not sign. Why should I learn speech? I felt it should not have been forced on me.	30. Speech lessons emphasis with no usability of skills at home was resented	30. meaninglessness of speech emphasis
31. I read and wrote well, but still I was placed with the "slow" students. Visitors came and praised the oral students; I observed and wondered why that group got the special attention, I felt that the students in my group were doing good work that deserved attention even though the oralists could speak while we could not. More people came to observe them rather than us; that made us feel that we were not bright. We were put down; however we had been accepting it for years.	31. Disturbed with preferred attention/ treatment for the oral classmates.	31. self-esteem language-linked
32. If my 6th grade I proved that I could learn to read and write without help of a hearing aid; I did not have to depend on speech and speechreading. I could write and pass. They were surprised and thought that I was exceptional, different,	32. School administration felt that because she had deaf parents, that explained her writing ability rather than through her own efforts.	32. personal values underestimated by school

just because I had deaf parents. Actually we could do well like the others.		
33. In my 9th or 10th grade, I rebelled and wanted to sign in the classroom. We knew that some of the teachers could sign. I did not want to rely on speech reading. When we were in our tenth grade we had stopped advancing because they did not have enough teachers. I was asked if I would be interested in going to a mainstreaming program in a school for the hearing with an interpreter. No, I was not interested. I was asked if I would move to the U.S. School for the Deaf; I declined. I decided to go to Gallaudet University. I had enough of the mixed feelings. They had not treated me right; otherwise we would have moved much further ahead in school.	33. As an adolescent she determined that she had enough of the language controls and restrictions in the classroom and sought to get out.	33. self-directedness and language break-through
34. I recall writing when I was 7 years old. Mother and Father did not write sentences at home, never, never. Mother and father signed and explained word meanings; this helped me with my reading. He explained meanings to me through sign language. They had never taught me how to write. Words and reading materials were signed.	34. Through the sign language (ASL), the basic home language, parents very helpful and supportive to the student.	34. written school and home languages separate
35. Sometimes Mother and Father were stuck; they did not know signs for some English words even though there were signs for them. Sometimes they did not know words for some of the signs.	35. Translation/ interpretation of ASL and English idiomatic samples are sometimes difficult even for self-taught bilingual adults.	35. contextually dependent bilingualism
36. I learned how to write	36. English syntax rote	36. structured English

sentence structures through Fitzgerald Key at school. While I looked at the charts with sentence patterns on the boards I felt good when I noticed similar patterns in reading. They were emphasizing the patterns. There were charts on the wall; I kept on noticing similar patterns in the books and on the charts.	learned through frequent exposure to patterns eventually led to her recognition of similar structures in reading; reading becoming more meaningful. Pragmatics developing.	lessons, confidence builder
37. Rules were explained in speech; I was stuck and uncertain. I asked how and why questions; I needed help. Nothing. I made guesses and figured out meanings for familiar sentence patterns. I could not ask questions because I could not speak. I missed opportunities to understand things. I was holding back my questions, questions in words. Later I asked Mr. D.A. Model for help; he explained to me. Sometimes I felt it was above my head. I could not find students at my level who could help me. I memorized some sentence patterns and how to rearrange parts of speech.	37. She found that it was difficult to work toward desirable speech performance levels; furthermore learning subject matter from teachers through speech was also difficult; deaf mentor was there when he was needed.	37. deaf mentor supported learning
38. When I was 17, I went in Gallaudet. Deaf teachers there explained a lot of things to me. Things began to clear up. A break-through! Finally I understood what adjectives meant. It looked like my ten years of prior school efforts cleared up in my first year at Gallaudet. I used to be stuck being unable to discuss or ask questions.	38. Deaf instructors at Gallaudet helped her in making sense out of her "mechanically learned" English.	38. deaf teachers key to appreciation of English
39. At Gallaudet they helped me understand and accept the language of the hearing. "You cannot change that," they had	39. Her ASL-English bilingualism awareness further enhanced at Gallaudet.	39. bilingual awareness

advised me. I finally began to understand. Through my years at Gallaudet I eventually met with and dealt with problems.		40. benefits of bilingualism
40. They said they used Signed English but to me it was more like ASL. They could sign; I did not realize that it was in English sentences. Wow. I could understand clearly. I saw the words like "toward" before; I asked if it would be similar in this "TO" in the "MOVING TOWARD" in signs.	40. Comprehension of English semantics improved through better awareness of corresponding semantics in ASL.	
41. Every morning... nursery rhymes; we were 7 or 8 years old. As an adult I realized that encouraging children of this age group to sign such rhythms would be insulting to their intelligence today. Those days we thought it was OK. But anyway we vocalized "O Canada", "Maple Leaf Forever", "Psalm 23" every morning. We had to memorize them without understanding their meanings.	41. In retrospect she felt cheated at the school where her ability to progress was hindered with language-related activities designed for younger students.	41. anger over former languaging experiences
42. I memorized along. Anyway every morning I vocalized in front of some people. I thought nothing of it until I was older. As I was looking at my sons, 3 and 4, I became disgusted with how they treated us when we were 7 or 8.	42. Memorizing became reliable for retaining incomprehensibilities until help was available.	42. memorization: rote learning strategy
43. There was nothing to do. We had to memorize over and over again; we were kept busy memorizing lines after lines all morning. In the following day apparently the teacher followed the same lesson plans.	43. Much of her school day classroom learning relied on memorizing.	43. memorization: rote learning strategy
44. Science. Math. I had	44. Incomprehensive	44. Incomprehensibles fed

to memorize; I could not understanding concepts. One teacher was speaking while pouring liquids from one beaker into another. I was watching the activity and trying to figure out what was happening. At home I asked my father to help me understand those things; he explained and I did not realize it was that simple. I admit I got about 4 or 5 out of 20 in the classroom. The green plants...the celery stalks drawing up water...all memorized for final exams. I had to study and memorize over two weeks. I just repeated everything from the notes.	subject matter memorized, then clarified through discussion among peers or with deaf adults	and memorized
45. I never wrote in my own words, never. I could not understand. I did not know how to express in my own words.	45. English grammar unuseable during pre-adolescence; it was difficult to create or think with.	45. inadequacy of English for expressive communication
46. I saw experiences but was not sure how things worked. I just memorized my observations... they used speech in explaining them. I made guesses; they marked it "Right" with a check.	46. Incomprehensible subject matter memorized; later help sought outside the classroom.	46. incomprehensibles memorized
47. The Social Studies teacher was signing, "Long ago the British soldiers climbed up the cliff and made a surprise attack on the fort"; I understood. In Social studies I could write some but not in my words. I did not have to memorize as much. I remembered recognizing the familiar sentence patterns in books. I began to write with more confidence.	47. The need to rely upon memorizing eventually diminished during the letter part of adolescence.	47. meaningless learning giving away to meaningful learning
48. At Gallaudet I tried to write in my own words to show what I understood; I tried to express myself in	48. Gallaudet instructors encouraged her to be more creative with her writing in English.	48. linguistic risk taking encouraged

writing. In my first year at Gallaudet the instructors asked me why I had to memorize things. I could not explain why. He/she encouraged me to memorize less and try to understand and express in my own words. Eventually I began to change my writing style. I began to notice that the deaf students were signing and writing in their own words without quoting much from books. I learned that I did not need to copy from books. I learned that it would be better to express myself in my own words. With my struggling writing, they told me that I had been writing like school kids. Eventually three or four years later, I was finally able to express myself in writing but in very basic English.

49. It looked like all the teachers could not sign; they were not allowed to sign. In my growing up years until I was about 14 years old, I had known only two of them who could fingerspell and sign in English. Both signed on-the-sly; we understood that they would risk losing their jobs if caught signing.

49. She felt cheated by the unwillingness of her high school teachers to sign in the classroom.

49. regret, anger over inhibition of signing

50. One teacher wrote World History samples on the board while speaking at the same time; I was stuck, lost. I had to memorize and then discuss the materials among three of us classmates. One year before we went to Gallaudet College, we were discussing lessons together. Student A and Student B; three of us got together helping each other. We felt better. We could write.

50. Peer support was recalled as important in making progress with subject matter.

50. peer-supported learning

The teacher's speaking was really "over our heads", hard to understand.		
51. Signing. I would prefer to see them sign. I was not interested in those who could not sign. I remember good relationships wtih the ones who could and would sign.	51. Signers are preferred social associates.	51. socializing, language-linked
52. I had a high respect for Mr. D.A. Model. He signed to use during meal times; he could sign. The deaf students usually stood around him asking him questions. He told stories; he really could. Other houseparents were left out alone. He stood by each table in the dining room and told us news. Every Sunday he also told us stories. I had learned how to tell stories through him. Without Mr. D.A. Model, I would not know how to tell stories.	52. Mr. D.A. Model was always there when students needed him; he is still respected; identified with him; many values learned from him; a "lighthouse" role model.	52. supportive deaf mentor
53. My father is a good story teller, too. While Mr. D.A. Model was good on the stage, my father was good at home. Mr. D.A. Model taught me how to tell stories and to act. He is the one. Without him, I would not know what would happen to me.	53. Father is also a significant role model.	53. supportive deaf mentor
54. He was the chief dormitory supervisory for boys and girls. He looked after sports and movies as well as supervising us at meal times. He lived in the nearby house and came to school daily.	54. Mr. D.A. Model was highly respected.	54. deaf mentor valued
55. People at Gallaudet University helped me a lot. My five years there were the best. They helped me with my English; I could read better. I could do	55. Gallaudet University and the deaf instructors are given much credit for her improved attitude toward English.	55. deaf instructors and English facilitation

research on my own. That was at Gallaudet where they had taught me a lot.		
56. I am one of the many deaf people who strongly believe that the deaf think in pictures.	56. Thinking is perceived as language-independent.	56. language- independent thinking
57. Stories appear in the mind like movies. Actions. When I was not sure of certain printed parts of a story book, I would ask questions and then visualize in my mind. Thinking in English? Nothing. Blank.	57. Story book content imagined rather than symbolically processed during reading; English and ASL seemed to be non-existent in the cognitive process.	57. imaginal cognitive processing
58. Let us suppose they had spelled samples of idiomatic English; I would think in combinations of English words and pictures. I would visualize "raining cats and dogs" in action or pictures with cats and dogs falling down. I would struggle with it and ask questions. They would explain that it meant raining hard; then I would exchange it with a picture of raining hard. Then I would visualize a pouring rain before accepting and understanding the idiom clearly; that is it. Thinking in picture was always important; thinking in pictures...movies in the mind. All the deaf have the same experience, I am sure.	58. Idiomatic English samples are pictorially interpreted prior to expression in equivalent ASL idioms.	58. verbal interpretation as imaginally based
59. When I write in English, I think in English. When I read, I think in pictures. When I must decide how to express in words, I form sentences in the mind beforehand.	59. English words seem to be pre-formed in the mind before they are written.	59. words as end-products of thought
62. LOVE would be "seen" as a picture depicting a boy and a girl in love. HATE in	62. Reading comprehension is contextually rather than	62. meaning as context dependent

my mind would probably include the names of two specific persons or two specific animals that hate each other; I would "see" action rather than words in my mind.	lexically or syntactically dependent.	
63. Reading and comprehending stories....but if I could not comprehend some sentences in the book, I would either skip them or ask what they mean. With explanation, I would begin to compose pictures in the mind.	63. Incomprehended word compositions creatively interpreted.	63. imaginal processing
65. Teacher M - his name sign is M. The man with the special moustache; he signed very vividly. Wow! Impressive! I enjoyed learning from him. Back in the school days I did not know why I had to write in English. I did not understand why I had to write. They said writing would be important for dealing with clerks in stores and restaurants for examples; they insisted that I had to write without really explaining other possible future uses. Letters to parents? It was not really that exciting. Writing meant nothing to me. But at Gallaudet, I realized that writing was important for course work, letter writing and other purposes.	65. Deaf instructors at Gallaudet supported her efforts to gain English skills.	65. deaf instructors and English facilitation
66. In my first three years of teaching I found out that Signed English did not really help students write better. I thought it made writing become worse. They tended to overuse words like "is" and "-ing". I think it would be better to perceive in ASL and make mistakes in writing. I would not mind this type of mistakes. I could make	66. As a adult-teacher she observed awkward use of English syntax among her adolescent students.	66. familiar patterns of "deaf English"

comparisons. When I had moved to City A, I saw the same type of mistakes in the writing of students in both City A and City US.		
67. In the 1980 workshop they explained that ASL was a language; thereafter I realized and felt that ASL was a respectful language with their own rules. A separate language. I realized I have been having two languages; I could switch between them. I was not really aware the word, bilingualism, that time. I can switch between the two languages. I can change. Once or twice I would get stuck. I would need a dictionary of idioms for the deaf.	67. Until recently she did not realize she had always been a bilingual since early childhood.	67. unawareness of being a bilingual
68. I noticed that I could use ASL. Many deaf people have been using ASL without knowing how ASL and English relate to each other. I was proud of myself for being able to handle two languages. I feel that my ASL has been the reason for my improving English skills. With picture and word combinations, the deaf tended to accept English better. Without word and picture relationships, what are there?	68. Proud of being a bilingual.	68. recognition as a bilingual appreciated
69. No way. No relationships. French was not my language. I had to memorize it for two years. I had forgotten much of it except for some common French words I have been noticing from time to time. I felt no affinity with it. Not my language.	69. Unwilling to learn French because of her need to master English.	69. no affinity with an extra "hearing language"
71. After my having discussed ideas in ASL, I had noticed that students	71. As a teacher she noticed superiority in written English among deaf	71. deaf child's English and deaf parents

could wrote full pages reasonably well even with "broken" English. Still their writing was good with good self-expression. With the changes in the school communication policy that required Signed English, I noticed that the student started to write much shorter compositions. Self-expression apparently became difficult. Some students still wrote in ASL structure with some drawings; I tried to read it but could not figure it out. I had to read and sign the written samples and form sequences of pictures in my mind before eventually getting what they were trying to say.

parents.

72. Improving with time, yes. I noticed children who have deaf parents write better even though they had been signing all their life. They wrote more creatively and better.

72. Deaf children of deaf parents tend to write better than those of hearing parents. (Observation)

72. English usage as developmental

74. I want to tell you something more. Teachers sometimes put word cards up to encourage the children to learn words in isolation. RUN was one such word. I was 7 years old I learned to associate RUN with a picture of a running boy or with a mental picture of a running action. I had fixated that in my mind. Some time later I noticed that "running" also referred to moving water and thought it was wrong. It took me years before getting used to the fact that English words have multiple meanings. From that experience, I want to advise present teachers against introducing words in isolation.

74. Unless fixating English words with given pictures or actions is replaced with establishing semantics in context, deaf adult will suffer with "deafism" in terms of English usage.

74. English learned best in context

Supplementary Excerpts	Supplementary Paraphrases	Supplementary Themes
1e. I was sort of scared and confused. When I felt that way, I became so quiet trying to figure out my inside feelings and thoughts I kept all to myself till I got home and saw mother sign. I felt open and normal again. I had someone still there to talk to.	1e. The experience of having been removed from teh accessible home atmosphere and confined in a hospital for two weeks during toddlerhood was traumatic.	1e. traumatic experiences in restrictive environment
3e. Those who could not sign made me feel uncertain and more tense; I had to concentrate on seeing what they were doing to me or what they were trying to say to me. I felt locked in. Those who could sign made me feel comfortable. No tense feelings. I felt happier.	3e. Selective socializing interactive and language-linked.	3e. socializing language-linked
4e. When I was very young I knew them as children of deaf parents, but still I could not feel comfortable with them because they could not sign and I could not make friends or make first approaches. No communication at all; so I avoided them like I did with kids in my neighborhood. I kept away from them as I did not know how to communicate with them nor know what to say.	4e. Early exposure to deaf children and adults; peers with similar sign language quality preferred socializing partners.	4e. socializing language-linked
5e. I felt that they might have been brainwashed into believing that speech was important to deaf children. Mother's teacher told her that the former had a good speech as she had always practised. She felt so good. She had been thinking that sign language was poor English. So I assumed that parents wanted me to do the same, learn to speak. My father	5e. Teacher used her mother as an example of her good students in the past.	5e. misguided teacher views on language

did not seem to care much but he wanted me to have good education starting at an early age. As speech was a part of the school program, they supported it and wanted me to have the education.		
7e. I felt like a failure and was very confused. I could not help thinking how they had tried to teach me or make me learn. I was so frustrated and ashamed while wanting to succeed. I felt I could not make it in school because of that speech.	7e. The speech teacher's persisting efforts seemed to be incompatible with the child's self concept causing the child to feel like a failure.	7e. teacher direction - feelings of failure
9e. At that time I felt like....strangers coming in our house and taking me out without letting me know what it was for. I recall having this feeling...like soldiers taking children without any explanations. Parents did explain briefly but not clearly enough to satisfy my curiosity.	9e. Decisions in the hands of hearing professionals.	9e. "professional" direction
10e. While I was there, I was calm, really shut up, feeling tied down while waiting for my turn. Tense. I often looked at the other kids and felt for them as they were struggling with their speech. I felt sad for them but when the teacher said, "wrong"; that made me feel angry. I knew that we had to have good speech to be liked by the teachers or others. The wait was like a long wait for a bus that never came.	10e. Performance in front of adult audience followed with applauses was perceived as irrelevant and meaningless to the child.	10e. meaninglessnes of performing for adults
11e. I admired the teacher because she was nice. I hate speech but still I liked the teacher. She praised me a lot for other things like my lovely handwriting.	11e. Frustruated with the teacher during speech drills, but as a person the teacher was OK.	11e. meaninglessness of speech-emphasized lessons
12e. Mother was frustrated	12e. Mother responded to	12e. emphathetic, as she

realized that speech did not work for us. She wanted to find a good school for me. She did not agree with the day school program as she had grown up in a residential school. Several years after the residential school was closed; I was enrolled in the day school. She saw a difference between the residential and day program, noticing that the kids there were not the same. They were communicating like 4 or 5 years old kids while they were 6 to 8 or even teenagers that time. That bothered her; she knew that I could not go back to the residential school as it was shut down. Mother could not write or communicate with high officials to ask for better education for me. I really kept on bugging her until she asked the deaf guy who could write well; he worked for the government. Eventually I went to the province B residential school for the deaf.	child's concerns about school.	supportive parents
13e. With my English consciousness it made me wonder whether I was qualified to teach. At one time I was confused. I felt I should be teaching as I could communicate with students. I would feel more comfortable if I had been teaching younger kids English as everyone was watching and judging me. At that time I thought ASL was a form of broken English or an inferior language; so I was very careful with how I communicated.	13e. English self-consciousness diminishes as confidence with it and ASL increases.	13e. evenutal confidence with English
16e. (After having been taken to the residential school...) At first I missed	16e. English self-consciousness diminishes as confidence with it and	16e. transfer to new school; new relationships and anxiety

home and was afraid that I would be having experiences similar to those in the past speech classes, the Kiwanis Club meeting, the hospital....I was hoping I was not going through those again. I really cried so hard. Parents felt bad but they were sure that things would be fine as they had the similar experience in their old school days. Anyway on the train I saw kids signing all day. No one told us to stop signing like they did at the day school. I waited and waited to see what was going on before I signed. After having entered the school I noticed that the supervisors did not sign. They spoke to us; "Oh no, not again" I thought but I waited to see what was happening. In the dormitory we slept; in the morning a nice senior girl woke me up and smiled at me. I saw her smile. It might have been Student Ms. M. Anyway I was still sceptical and waiting. I wanted to wait and test for a while. I saw some kids signing a little but not fluently. I was looking for those who could sign fluently. I found none; they reminded me of the kids at the day school but they were a little better. I pretended that I could not understand till Mr. D.A. Model told the others that I knew how to sign well. I started to sign and attract them. Then I felt like becoming normal and better afterwards.	ASL increases.	
17e. He was like a saviour to me. He was everything to me; I went to him for vocabulary, questions, classroom problems, etc.	17e. Mr. D.A. Model proved to be supportive and resourceful like her father who was also deaf.	17e. supportive deaf mentor

He would talk to me till my food became cold. I could see him mostly in the dining room but not after classes. I saw very little of him around the school grounds. I came to him. He told news to all of us. He was special to us. We looked up to him because he could communicate to us.		
18e. In the hospital when I was young, I felt that they could not talk to me at all. I felt left out, scared. Of course, I was hurt that I was not hugged nor played with. I felt left out like a discarded item.	18e. The experience of being isolated in a room of people was harsh.	18e. isolation in restrictive environment
19e. Hurt. Humiliated. I knew I could do better but speech robbed my pride.	19e. She was hurt when she was denied use of her sign language.	19e. self-concept affected by language preclusion
20e. Wow! I was scared, afraid of possible punishment and being labelled as a problem person or something. Everyone would look down at me. I did not know how to complain through the rest of our school years. I finally learned how to complain after I had graduated from Gallaudet. Oh Boy! Anyway I was scared and uncertain because I knew no one would back me up. The kids would stay and accept what they did no matter what. It was wrong or impossible to complain. We feared being punished or looked down upon. I was confused but felt good in telling how I felt and then...Oh no....I should not have said those things as I would probably be thought to be a rude person.	20e. During adolescence her assertiveness overcoming the stranglehold of adult-centeredness.	20e. becoming self-directed as an adolescent
21e. No. I knew why my parents could not teach me	21e. In adulthood, she sympathized with her	21e. appreciation of supportive parents

how to write; they were not taught when they were young. I was well aware of why they could not, but they could help me with general information, news, home advices, etc. Everything except English. I just went on knowing that I would learn it at school eventually.	parents' limited English skills but appreciated their resourcefulness and care.	
22e. OK. Back to the parents. If my parents had known how to teach English but insisted that I be patient and take speech lessons, I would become angry, furious. I knew all the way why they could not teach me the language like the teachers. I was angry at the teachers because they refused to sign. I knew that I would have helped. Their unwillingness to sign made me angry.	22e. Her parents' limited English skills did not matter to her.	22e. compassion for parents
23e. OK. About Fitzgerald Key. It made me feel good. My mind opened up as if it was reborn. "Ah, that is English", I thought. I found that I could learn it fast even without having speech skills. I stayed with this language learning program for 10 years. However at Gallaudet, I found out that I had been writing in verysimple rigid English style. The English teacher encouraged me to improve my writing. I could not understand what was going on. Then they explained meanings, how English worked, how words could change as verbs or nouns, multiple meanings, etc., etc. To me it was another re-enlightenment. I wish my high school teachers had told me that long before.	23e. Structured written English lessons were easy and enjoyable but the English was difficult to use during adolescence.	23e. English easier to learn than use
24e. Yeah, at first I	24e. She read English	24e. writing difficulties

refused to write as I was not sure, very uncertain. I had noticed how deaf people wrote notes; I realized I could not do that as well. Eventually I became more confident with my writing skills. Whew.	better than writing it during adolescence.	
25e. Very stressful. Careful. Anxious to succeed. Frustrating. I had to memorize to pass tests, a way to prove to myself that I would not need speech to succeed. They had said that I was exceptional. I felt so frustrated but kept on going. Stressful.	25e. Rote learning remembered as stressful during high school days.	25e. stressful English rote learning
27e. Hurrah. The teachers (who broke the school rule and signed) were heroes. They were so human. I was glad that they were willing to do that.	27e. A sense of affinity felt with the teachers who signed while the supervisor was not around.	27e. affinity with deaf adults who sign
28e. Yes. I felt relieved as I wanted to know what they (classmates) knew and thought. I had no idea of how people thought or what their opinions were; I wanted to be sure. It was a relief to have their support.		
29e. Father. Teacher. Communicator. Advisor. Information source. Oh, he was the hero. If it had not been for him, I would have become a simple woman working in some office, perhaps as a typist throughout my life time. He really helped me to become successful - I went through Gallaudet. He was the only one who told me that deaf individuals could teach while the other teachers at the school had said we could not teach because of our lack of	29e. The female and male deaf mentors supported her continuing English learning.	29e. supportive deaf mentor

speech skills.

30e. People like the deaf teachers and deaf classmates at Gally understood our English problems; so I felt comfortable, no longer feeling tense. They had said that problem was related to the fact that we could not hear the English language usage. I felt so much better knowing that my limited English skills had nothing to do with my intelligence. Whew!

31e. Still at that time I was still careful because, to them, English was so important in everything. I was cautious and a little conscious with my English usage 1980. I feel so free now.

31e. English consciousness eventually diminishes.

31e. English and self-consciousness

32e. Safe. Whew. I am glad. I can use both ASL and English even though they are two completely different languages. I know that ASL is not English at all. I am so proud that I can use both of them and call myself a bilingual rather than being uncertain.

32e. She enjoyed being considered a bilingual with ASL and English.

32e. realization of being a bilingual

33e. Oh Boy! What for??? Why should I have to take French? What did I need it for? Nothing. I had a very poor attitude toward learning French; I was reluctant to learn it well. Why French? I would not communicate with it... I have enough problems; I had to learn to speak and then write and read... now French. I would rather focus on my English writing skill development and communication in ASL. Period!

33e. French not appreciated because it is another "hearing" language.

33e. extra "hearing language" not desirable

34e. OK. At first I was

34e. In retrospect she felt

34e. feeling of unfulfilment

related to school angry, wondering why the teachers did not tell me before. I wondered if I had embarrassed myself in the past years. I felt handicapped with the limited word usage while knowing that there were a lot to learn and use words. I could not be flexible with words. Before I go on, am I answering your question right?	shortchanged by the school.	related to school experiences
35e. Like linguistics, we learned arbitrary and iconicity... now I discovered how I think and learn. I learn mainly to define words through having interpreted the meanings in mental pictures. I would need time to figure out and comprehend semantics. For example, if arbitrary words turn up in my thinking. I would try to fit them in the pictures. I wish the teachers had told us long ago. I was so disappointed that I had wasted my time.	35e. As an adult, appreciation of language heightening.	35e. adult perspectives of language learning

Table 10

Thematic Clustering of Ella's Protocols

Themes	Descriptions
1. Restricted Language Environment (4, 15, 27, 49, 1e, 34e)	1. When she was prevented from having interactive communication and meaningful relationships with others in a place, she experienced the harshness of being in a restrictive environment.
2. Accessible Lanugage Environment (23, 16e)	2. At home and in the deaf community she enjoyed unrestricted access to a variety of people who used the sign language which was also hers.
3. Language Based Socialization (21, 51, 3e, 4e)	3. As a child she socialized with the peers who also used the sign language and have deaf parents; hence socialization may be considered language based.
4. Meaning of Language Contextually Dependent (62, 74)	4. English words would remain meaningless unless they are comprehended in context.
5. Other-Directedness, Power Struggle (11, 15, 23, 41, 9e, 10e, 11e)	5. She experienced being subjected to the others' controls without really knowing their intentionality in advance. (Powerlessness.)
6. Meaningful vs. Rote Learning (9, 10, 36, 42, 43, 44, 46)	6. To her, schooling was deemed as confrontational rather than facilitational since she had to "suspend" her home values in favor of learning those of school.
7. Supportive Parents (5, 19, 22, 34, 53, 21e, 22e)	7. Her parents were sensitive and responsive to her concerns and made efforts to deal with them.
8. Deaf Mentor (24, 37, 52, 54, 17e, 29e)	8. Deaf mentors are recalled as being special persons who were there when she needed them. They helped her through rough phases of adjustments to incorporate school promoted values.
9. Self-Concept (20, 25, 28, 31, 32, 48, 24e, 31e)	9. Her self-concept was affected by the feelings of inadequacy associated with the hearing values.
10. Speech, English (26, 30, 37, 45, 72, 5e)	10. Teachers actively promoted speech and written English at school with anticipation that Ella would eventually succeed with the skills. In adulthood she found English increasingly useable but was not as successful with speech skills.
11. Bilingual Awareness (40, 67, 68, 71, 13e, 32e)	11. She did not really realize that she had been a bilingual with ASL and English until she was into adulthood. This bilingualism simply emerged in coincidence with her use of the two languages.

12. Supportive Peers (50, 28e)	12. Her deaf peers at the residential school and she got together and helped each other to make up for limited communication with the teachers.
13. Deaf Instructors (39, 55, 65, 66, 30e)	13. The deaf instructors showed her how the function of English compared with that of ASL which stimulated her appreciation and awareness of English. (Mentor support.)
14. Additional Bilingualism (extra "hearing language") (69, 33e)	14. Additional languages like French were deemed undesirable especially while she was still in the process of learning English.
15. Cognition, Imaginal Processing (56, 57, 58, 59, 63, 35e)	15. English words and ASL signs seem to be non-existent in her imaginal processing which also involves thinking.
16. Didatical Relationships (8, 16, 17, 18, 7e)	16. She perceived that the hearing adults, particularly teachers, were more right than her deaf parents when it involves language. "Hearing-is-Right; Deaf-is-Wrong" syndrome seemed to be encouraged in this type of environment.
17. Individually Recognized in Authentic Relationships (3, 5, 6, 19)	17. Authentic relationships refer to interactions with peers and adults who treat each other as persons rather than as subjects to manipulate.

Note. Numbers in the parentheses refer to the numbers of the themes in Table 9.

Table 11

Higher Level Themes and Descriptions

Themes	Descriptions
1. Accessible/Inaccessible Worlds (1, 2)	1. The world of the deaf was perceived as accessible and interactive and the hearing world, inaccessible and alienating, at least to the deaf child.
2. Power Struggle; Self-/Other-Directedness (5, 6, 16)	2. The child struggled to make sense out of the hearing teachers' efforts to encourage her to learn speech skills. Her peers and family members signed.
3. Supportive Family (7, 12)	3. Her deaf peers, deaf parents and contacts in deaf community perceived as the significant and meaningful supporters throughout her formative years. Deaf adults were valued as mentors.
4. Self-Concept (9)	4. Her self-concept was positively and negatively affected by the values of the hearing and deaf worlds.
5. Communication and Relationships (3, 17)	5. Relationships thrived on the basis of shared language and communication methods.
6. Language and Cognition (15)	6. Neither ASL nor English seemed perceptible in her thinking processes; instead imaginal processing is perceived as the basis through which comprehension of content in symbolic languages is possible.
7. English, Written and Spoken (6, 18)	7. Writing and speech skills were rote learned. (Meaningful vs. rote learning). Her writing and reading skills continued to improve more positively than her speech skills.
8. Spontaneous Bilingualism (11, 14)	8. This phenomenon emerged in coincidence with increased use of English as a second language; the acquisition of bilingualism is perceived as an unconscious processes.
9. Reflections on Prior Schooling (5, 10, 13, 16)	9. Bitterness and anger characterized the feeling of being treated as target instructional objects rather than persons, particularly during the childhood and teenage years.
10. Deaf Instructors/Mentors (8, 13)	10. Ella had positive experience with deaf instructors and adult deaf mentor. They helped her maintain her interest in English and school work in general.

11. Confidence with Reading Skills (6)	11. During her adolescence, Ella struggled with speech and writing but enjoyed having good reading skills.

Note. Numbers in the parentheses refer to the numbers of the themes in Table 10.

Table 12

Common Themes and Descriptions

Themes	Descriptions
1. Accessible/Inaccessible Worlds (1)	1. Whether the world is accessible or not is related to the nature of sensory characteristics. Meaningful learning seems to be more compatible with the characteristics than role learning does. Meaningful learning enhances appreciation of the world. The world and the learner are co-constituents in essence.
2. Power/Choice (2, 3, 4)	2. Ella sought to maximize her role in the world of the hearing up to the levels in the world of the deaf. Along the way she experienced conflicts with others' values.
3. Deaf Adult Mentorship (3)	3. Ella valued her relationships with the deaf mentor during her adolescence when most the other staff members at the school could not communicate with the deaf students well.
4. Language/Communication (3, 5)	4. To her language and communication are closely correlated with the quality of relationships with others.
5. Supportive Network (3)	5. Ella sampled a full continue of socialization between alienation and total inclusion throughout her formative years.
6. Oppressive Schooling (2, 7, 11)	6. Ella's parents, siblings and peers shared the same language (ASL) and communication method (signing). She felt she had the support of the different individuals.
7. Bilingualim (8)	7. Ella's bilingual experiences included ASL at home and English at school. She switched from English skills encouraged at school to ASL at home and with her peers. Writing and reading eventually became more important as Ella became older.
8. Language and Thinking (6)	8. To Ella, there seemed to be no English words and no ASL in her thinking. Input messages were translated into action or imaginal units prior to translation into a language that was different from the first one.

Note. Numbers in the parentheses refer to the themes in Table 11.

Synthesis of Ella's Experiental Structures

Introduction

This synthesis is based upon reflections and interpretations on Ella's lived-experiences as analyzed through Tables 9 to 12. The headings in the synthesis reflect the characteristics of the information in the paragraphs rather than corresponding to the themes presented in the tables.

Accessible Pre-School World

Ella's preschool world was similar to that of "typical" hearing children living with hearing parents in a least restrictve community. In this type of community, individuals have access to others through common language and communication methods. Ella's deaf parents started taking her to functions at Deaf Church and a Deaf Club on a regular basis when she was a toddler. Her family language (ASL) was also the language of the Deaf Community. Ella had already established a viable language (ASL), communication method (signing) and social exposure to and contact with people in the community before she started school.

Advnaced Socializing Skills

Before Ella started school she had enough social know how to be able to tell whether deaf peers had deaf parents or hearing parents. She preferred those who also had advanced language and social skills. Ella said, "I did not really talk with the children who could not sign" (3:7). As another

example of her social precocity, she observed some conversation among the deaf adult church goers and decided that some of them were boring (3:21). She shared her complaint with her parents who told her to "keep quiet about it" (3:22). This incident might be construed as suggesting that Ella was more socially liberated than her parents when they were young. It could be that her parents had been accustomed to being oppressed for a long time.

Supportive Parents

They (parents) seemed surprised by Ella's complaints about her speech teacher who had also been their teacher. Although her parents thought that the child should learn to show respect for the older adults and her teacher, they hinted that they were pleased with her bluntness (3:8; 3:19). Through her parents' freedom of communication, Ella apparently had gained access to the essence of her deaf parents' personalities and their feelings. Ella knew where she stood with her parents. She had a feeling that they understood her. Eventually her parents acted on her concerns and had Ella transferred to a residential school which was thought to be more liberated than the day oral program.

The Restrictive and Inaccessible World

During her two-week stay in the hospital she felt isolated like an unwanted alien. The nurses and wardmates did not know sign language and she noticed that the hearing nurses gave the hearing wardmates more tender loving care. The experience contrasted sharply with her freedom at home and

in the deaf community. Before she started school she accepted that the world of the hearing was not as accessible to her as that of the deaf.

The Oppressive, Purgative School

Her first year in the oral day program was similar to that of her two week stay in the hospital in a way. Nobody could sign in the hospital and the teacher did not allow her to sign in the classroom. In the classroom she was treated as if she had no functional language and her teacher made her start with very basic speech skills. Even her parents thought that speech lessons were necessary for good education. Apparently the main function of the first year teachers is to purge deaf children of their preschool experiences and values and restrict them to school-promoted language and values of the hearing world. Her functional language (ASL) and rich visually-based experience were discouraged in the classroom.

Insensitivity of Schooling to the Individual

To Ella the speech lessons and drills emphasized in the classroom were meaningless; she saw no use for them with her peers, her family members and deaf friends. (3:10; 3:30). Furthermore the quality of her social relationships also suffered as she was placed with classmates with underdeveloped language and social skills. Most of them had all-hearing families (3:10e). Ella eventually helped some of them learn sign language (3:20). Ella definitely had a head start with her superior language and communication skills.

Teachers of the Deaf as Inefficient Communicators

She discovered disappointments in the classroom even at the residential school for the deaf. Ella (3:26) described how inefficient her high school hearing classroom teachers were as communicators. They used a rudimentary method of communication, using speech with occasional signing. Their communication style was so inappropriate that she had trouble comprehending what they were trying to teach in the classroom. Her English teacher's instructions given in the same manner did not make the language appealing to her. She had to memorize samples of teacher-presented lessons. She sought help from her deaf parents, a particular deaf staff member of her classmates after classes (3:37). It is difficult to assess how much educational delay she had suffered as a result of inefficient communication from teachers.

Deaf Adult Mentors

The particular deaf adult mentor at the residential school was like a lighthouse standing out in stormy seas. He had excellent signing skills and enjoyed discussing many different issues and topics with the students. He was also an excellent advocate of good education even though he was not a teacher. Ella approached him for help with her schoolwork as well as coming to listen to his many stories throughout her remaining years at the school. This shows that there is a strong sense of identity with a deaf adult especially where the rest of the staff members are hearing and could not sign well.

Effects of Rote Learning

Even though copying written samples from the board seemed to be a good way to learn written English, Ella found it difficult to express herself in writing. It was not until she was into her adolescence and early adulthood that she managed to overcome the effects of her rigid training in writing. This aspect of her experience seems to show that there may be something very wrong with the English language teaching strategy. Why did Ella have to wait until she gets help from deaf professors at Gallaudet University before she could express herself in writing?

Self-Directedness

During her adolescence she was invited to enroll in a mainstreaming program with hearing students where interpreters would be available to facilitate acces to hearing teachers (3:33). She decided against accepting the invitation in favor of going to Gallaudet University. That decision was understandable as she had spent enough time in classrooms with the hearing teachers who did not have good signing skills.

Deaf Teachers and Appreciation of English

Her deaf instructors or professors at Gallaudet University helped her to see more value in written English and encouraged her to break away from the crutch of fundamentally taught written English styles (3:38; 3:23e). One may conclude that deaf instructors can be sensitive to the uniqueness of deaf students trying to master written English and are in a position to help the

students better.

Bilingualism: A Cognitive Process

Her language development exemplifies the uniqueness of humans' flexibility with language. She started with ASL and then studied basic English skills (speech and writing). Throughout her childhood and preadolescence her English skills (except reading) were difficult to use. She switched to ASL outside the classroom. During her adolescence she decided that English was important. Evenutally she managed to write reasonably well. As an adult she signs ASL and reads/writes English. She had acquired both languages through interactions with people. Since no one had taught her the art or science of switching between the two languages, this bilingual skill suggests a basis in cognitive processes, rather than linguistic processes.

Thinking: A Language-Independent Process

Ella described her thinking as an imaginal rather than a verbal process. She perceived that she had been converting messages in English into imaginal or action manifestations prior to her comprehension of the content. Like bilingualism, thinking seems to be a cognitive rather than lingual process. This means that thinking is independent from reliance upon any particular language.

Summary

Ella's basic schooling experience may be summarized to show that the educators failed to incorporate the richness of her preschool language and social experiences as intergral parts of the curricular activities. They also failed to recognize her need to expand her world-experience in an unrestrictive environment. They literally intervened and stifled her natural language and social development. Their actions were certainly inconsistent with any common sense pedagogical principles. Rote learning, repetitive speech lessons, and inefficient communication by teachers characterized her experience of schooling. Outside the classroom she used a functional language, communicated with her peers, siblings, parents and community people. Her classroom world was the antithesis of her outside world.

Table 13

First Level Thematic Analysis of Liz's Protocol

Excerpts of Liz's Protocol	Paraphrases	Themes
1. OK. I can easily share experiences, using either English or ASL, but I cannot imagine telling you how I get to know that. I started school about 30 years ago. How did we learn? I do not know. At that point I did not realize I would need to analyze how.	1. Confident with language usage; uncertain how this level of confidence had been attained; her own language competency development could not be explained.	1. natural language acquisition, an unconscious process
2. Like I told you before, my parents are deaf. I suspect now that... People have been asking me, "How do you acquire writing English skills?" Parents being deaf might be a factor, but not necessarily so. I do not know.	2. She felt that the factor of her having deaf parents cannot be ascertained as an explanation for her adulthood language competency.	2. language acquisition is personal
3. One thing I know for sure is that in all my life I have been reading...this must be related to the acquisition of English skills, at least that is for me. ASL - that is my Mother's natural language I acquired as my first language. My first language is ASL. English came second.	3. ASL is determined as the mother language; it is suspected as a basis for her English language competency in adulthood.	3. ASL: mother language
4. At school I cannot remember...when I was five I went to a residential school for the deaf. I suppose they used signed English. ASL itself was not... English in school (nodding). I recall taking speech lessons at school. At five... I am able to remember. I know that teachers had been signing	4. Also exposed to signing at school at the age of five; teachers used English-based signing.	4. signing as early experience

since I was small, not oral or anything. I am not sure if I could call it a Total Communication school but signing was used there.		
5. My experience as a young girl growing up, I socialized with deaf people and some of deaf students who went to school with me also had deaf parents. I also could tell which of the school students did not have deaf parents and which ones did.	5. Signing peers who also had deaf parents were preferred as socializing partners.	5. language based selective socializing
6. Nowadays as a teacher I have been noticing that many children who have deaf parents do have terrific signing skills but suspecting that this does not necessarily mean they would also have terrific reading and writing skills unless (emphatically) they have been reading. I know some of the students who could not read or write even though they have deaf parents. I should conclude that having deaf parents makes no difference. I think reading is a more important contributing factor than that of having deaf parents. Perhaps both factors are compo[redacted] interdependent.	6. As an adult she is not convinced by any suggestion that the factor of having deaf parents would have anything to do with her mastery of English in adulthood.	6. (an experience-based inference)
7. Mother and Father encouraged me to read. School encouraged me to read. If you observe students like the ones I have here and notice some of them reading, chances are that they have a good mastery of English language. It has to be related to reading skills. When they are young, they should be read aloud to; that is how they acquire their English language	7. Parents recalled as supportive, encouraging her childhood reading activities.	7. reading, family and school encouraged

mastery. Reading, and writing experience are essential.		
8. Using ASL as an expressive language is advantageous in that you can use ASL with reading.	8. ASL enhances reading efforts	8. integration of ASL and reading
9. ASL enhances understanding of communication. When you read and use it (ASL) you know what to discuss. It reinforces comprehension more than just reading and seeing English in other forms like written or signed English. Students understand reading better when they see connections between the two; consequently I enjoy reading.	9. ASL experienced as excellent langauge for discussing materials in printed English; however actual reading is stressed as important.	9. ASL assisted reading appreciation
11. Reading seemed to become meaningful when I was in grade 4 or 5, about ten years old. Before than that time, maybe I was not a serious teacher. Serious reading started at age of ten. Thick book like Four Little Women. Thick books.	11. Reading comprehension seemed to manifest at the age of around ten.	11. reading meaningful at 10
12. I have two younger sisters; they asked me to read to them. I read to them every night during summer breaks between the years at the residential school. Then when I was around twelve years old with my other sisters being eleen and eight, every week we read newspaper followed with make-up questions every Friday; yes we developed and asked our own questions at home. We had quizzes for each other in the summer times.	12. Reading becoming meaningful when also supporting her younger sisters' own reading skill development.	12. supportive family
13. Not just quizzes... teachers at school set up contests to encourage our summer time reading. Yes,	13. Play school at home involving sisters consistent with summer reading activities encouraged by	13. supportive teachers

other sisters being eleven that helped. They gave us forms. We went home in May and had summer holidays for three months. In the fall they would ask us, "How many you have read?"	teachers.	
14. Every two or three days three of us sisters...having sisters helps...we worked together, played together, reinforced together. Three of us cycled to the library and collected as many as books we could and carried them home. I recorded the books; it did not matter how well we'd read. It did not matter if we had read them or not. The idea was that we were exposed to the books.	14. The combination of nearby library, reading incentives and parents' support was thought as essential for encouraging reading enthusiasm.	14. supportive siblings
15. Eventually I began to pick up something that appeals to me from time to time. I recorded the titles and sometimes wrote a summary of each book. My younger sisters also wrote their book reports. We won the award for the most books read; that happened two or three times. I was proud for having won the award of reading the most books.	15. Reading comprehension started with coming across certain relevant passages; contests for book reporting.	15. meaningful reading incentive
16. Through the school years I continued to read.	16. Ongoing reading enthusiasm.	16. sustaining reading enthusiasm
17. I simply read and understand reading and then tell stories in expanded form to my sisters. Frustrations? None.	17. No problem translating printed in English into signed ASL in story telling.	17. effortless bilingual translations
18. I visualize the story in the mind when I read. I can understand the English language. Even if it is a long book story, I still can	18. Story book read, visually processed, and retold in ASL.	18. imaginal procesing

read it in one night and get it together and then tell it in ASL.		
19. Furthermore, our family lived 150 miles from the deaf school; every Friday or every other Friday. Mother came to pick us up. While we were riding in the family car for two and half hours for home on Fridays and back to school on Sundays, I always told my sisters stories, make up stories. Always they asked me to tell stories.	19. Story telling (made-up or reading-based) important activity involving the sisters; younger sisters insisting on more story telling.	19. familial reinforcement
20. Comics, yes. I was an Archie fan...Friendly... Casper the Friendly Ghost, Little Ritchie Rich. I had read piles of comics. No limits. Parents spent a lot of money on our comic books. I believe I started with comics.	20. Enormous investment in comics during childhood.	20. childhood comic book reading valued
21. Neither in English nor ASL, it seems. In reading thick books, I do not think in English or ASL. No. Pictures. It seems that I think in pictures when I read books.	21. Thinking perceptible as neither ASL or English dependent; imaginal processing seems to stand out as a "cognitive language".	21. imaginal processing, language-independent
22. I do not think in either English or ASL while watching TV. No. no.	22. Thinking during TV watching is also perceived as symbolic language free.	22. imaginal processing
23. No problems in interpreting and rephrasing meanings into English. No problems.	23. Translating from ASL into English; no problems.	23. bilingual translation
24. I had visited Gallaudet twice before my graduation with a High School diploma; I had stayed and visited at the university for one-week long convention. I had seen what kind of students there. At that time I realized that they were very different from our high school students.	24. Preparation for higher-level challenges paid off; readiness for university challenges included exposure to university students and their levels of performance/competency.	24. challenged by higher levels of communications

Maybe I was impressed because I was a kid, but I noticed that their level of communication was high and advanced. Even though there were 600 students in my school, the Gallaudet students' level of communication was very high. I knew that my class was at the top that time; however I realized that at Gallaudet there were students also from academic classes. The real cream of crop. I expected what I saw... there were keen competitions. Intelligent individuals. Advanced levels of communication.		
25. Twelve years ago ASL was not the issue at the school where I started teaching. I just taught the way I thought was the best without being conscious thinking of the school communication policy. I had nothing to do with it. When I started, I was not really aware of such communication policy. I taught things my natural ways. ASL? That was ASL? I was not aware of that. It was not analyzed twelve years ago. About ten years ago students began to understand that it was ASL. Before that time people did not understand. Right?	25. Not bothered with artifical language policies; functional language and communication cannot be displayed by policy language or language methods.	25. adult-promoted language methods not valued
26. I remember there was a movie in the library. That teacher was in charge of the movie presentation. I was new. The teacher was explaining the movie. Students were asking questions afterwards. One boy still could not understand and asked me; I explained. Whether I was rephrasing or translating	26. Her own confidence with language abilities was supported with her success in helping student understand what the other teacher tried to tell him.	26. natural method of communication resilient

into ASL or not, I was not sure. I just explained and the boy finally got it. I simply repeated the messages to the student in a different way. At that time I realized the difference and decided to keep my way of signing and explaining thereafter. I had determined that nothing would change me. If the students benefit, who are they to argue?		
27. Ever since school policies have been changing. At one time I was on the communication policy committee. I have determined not to let such inconsistencies to interfere with my work. I know what really works for the student. My attitude has been set. I guess I have been successful with my classroom teaching I always keep on changing my strategies and improving. ASL should be forbidden? No way!	27. Artifical language policies taken into consideration; personal convictions related to experience of success have overriding effect.	27. committed to natural method of communication
28. I did not know. I did not notice. I did not realize what her way of signing was; apparently it was a form of signed English. I could not remember. After that people had been telling me I was using a lot of ASL; I asked what was wrong.	28. Whether it was ASL, signed English or blends of both did not seem to make any difference to her as she was already lingually established.	28. unconscious ASL user
29. In the classroom I made some efforts to modify and accommodate Signed English, but eventually I did not let it bother me. In the first year I was consciously asking myself whether I was using ASL or not. I did not know. Nowadays I just went along.	29. Conscious efforts to use "policy language" are eventually overridden by her functional social language.	29. token attempt to adhere to English language policy
30. ASL has a role in	30. Reading and ASL are	30. reading, a bridge

mastery of English language. Again, I stress reading. Reading and ASL. ASL and reading.	thought to be separate but interactive.	between ASL and English
31. I remember the grade 3 or 4 teacher very well. Anyway Fitzgerald Key posterboard about this size were on the board above the blackboard. There was the Key on the blackboard, above the blackboard, and on my desk. There was a lot emphasis in writing according to the Key patterns, putting words in columns. I think I understood parts of speech in the Key. I thought it was good.	31. Reading and ASL are thought to be separate but interactive.	31. benefits of copying exercises
32. In grade 2, I worked all year on my penmanship. I recalled crying through the year trying to write neatly and beautifully before seem to make any difference to me as I was already lingually established.	32. The pain of having to handwrite to meet the teacher's idea of neatness in grade 2 is vividly recalled.	32. orientation to teacher's objectives (other-directedness)
34. I do not recall much writing until I was in grade 8. Summer school grade 8.	34. "Not much" creative writing until in her 8th grade.	34. writing skills becoming useable in adolescence
36. (trying to describe how "k" sound is made in the mouth.) I remember trying to pronounce "k". Then with the earphones.	36. A struggle with pronounction of "k" sound in her kindergarten year; speech lessons in her fifth grade.	36. difficulty with oral English
38. One of them was really skillful with speech even though her parents were deaf. She had a nice speech. Visitors came around her. The teacher would speak behind her back. She could reply in speech. They never asked me. I just sat, left alone. I just made use of the time to read, ten to fifteen minutes.	38. Reading to escape the strain of not being chosen to show off to visitors while they were in the classroom.	38. feeling of exclusion due to speech facility

40. In grade 8, I learned to lipread. Learned rules on how to pronounce; I understood them well. I was interested in learning them. Now that's why I know how to move my mouth properly. That year I won the best most improved award in lipreading; I was puzzled, surprised.	40. Positive attitude toard speech lessons recalled.	40. classroom learning enjoyed
41. Vordhorl in 1950's was doing a research on deafness; he chose our deaf school; it seemed to me that it was one of the good schools that time. he picked pairs of students in each grade level. I and the other girl had deaf parents. He was recording our natural communication on a film and analyzing our talk. I was aware of that. I was five that time. He would tell us to sit down and just talk to each other. She and I were good friends. We were talking about anything.	41. Good feelings associated with recognition of her natural communicate skills; a sense of specialness.	41. high achiever compensation
43. At nights I was taken to places, Lion's Club,... I remember the experience of being asked often. I was a "pet child" when I was small. Any bearing of that experience on what I am today, I don't know. A little bit of special treatment. I was selected; on Tuesday night, I was excused from dormitory rules like bed time at 8 or 9. I was out having fancy dinners in restaurant with teachers, supervisors and then taken to a meeting room where I was seated next to a five year old girl who also had deaf parents.	43. Good feelings associated with being selected for public demonstration in front of adult audience after special supper treatment.	43. high achiever compensation
44. During their presentation, I was sitting rather restlessly in front of	44. Good feelings associated with ability to demonstrate reading and	44. self-esteem and confidence with bilingualism

large audience. They were explaining. Sometimes there was older girl sitting next to me; she was also taken there for demonstration. The man wrote something on the board and I read it and signed the information. He showed me a book; I read and signed story passages. They would be interpreting my signing into spoken words. I saw him speaking but did not know what he was saying.	signing skills.	
45. They moved on to the other student who could speak. They never asked me to speak vocally. They apparently explained my intellectual abilities. Demonstration like that happened again and again in my growing up years. I enjoyed that.	45. (see #44)	45. self-worth appropriately recognized
46. In my High School years I was busy doing school work. They never bothered me. Demonstration became less frequent. In my college years, I became involved again. Bellugi research. I was her subject. 20 to 30 students took part in it. Every year Bellugi came from California and paid us $20.00 each for weekend research participation. We translated videotaped or live-signed information into written words. That was a part of ASL research start. They signed; we put down the word for each sign on paper. Also they gave us words to translate into signs. In other research settings, two of us were talking. We were also involved in Stokoe's work. Some of his research was based on our presentation.	46. Pride in having participated as a subject in research activities that eventually led to recognition of ASL as a bona fide language.	46. self-esteem associated with early bilingual skills

48. They would say, "You are a better writer" and let me write. I have been saying, "OK, OK". I do not know but I took advantage of that and wrote neatly for classes through the High School years. I like secretary's job. I did not really care about being a president; I would rather write.	48. Pride in recognition as a writer or secretary in demand by peers.	48. own writing skills peer admired/recognized
49. I prefer writing back and forth with hearing persons without relying on an interpreter. I enjoy doing that. I do not think interpreter can interpret accurately as I have sophisticated vocabulary as compared with others. Interpreter can never pick up my vocabulary. I adjust and sign basic vocabulary to make it easy for the interpreter.	49. Direct person-to-person communication is experienced as preferred to that type through a third person, an interpreter for instance.	49. direct dialogue preferred to dialogue through an itnerpreter
50. I would rather write. It is faster. Writing. I like to write. Even today. Hearing person sitting there; still sometimes I prefer not to use the interpreter because of the limited sign vocabulary. In reading materials English words are beautifully composed. Signing limited. If I had a choice, I would choose English over ASL. Playing with words and playing with signs; I am not certain if these would be comparable.	50. Written dialogue with hearing people enjoyed and often preferred; English language, itself, is admired.	50. value of ASL overlooked due to English emphasis
51. Now I understand ASL more. People have been noticing more about ASL. This can mean that their understanding of ASL has been growing. At this point of transition, I would still choose English. In teaching, of course I would use ASL to encourage students to read to pick up	51. Her own language, ASL, eventually appreciated more with better awareness of its language entity and functioning powers. Although English is preferred to ASL, strengths of both languages equally appreciated.	51. appreciation of richness of English and ASL

what other words mean in signing. I would rather let them find out for themselves.		
52. Both (hearing and deaf jokes) can be gross; both can be crude; both can be sensible. I understand both.	52. No problems in recognizing ASL and English jokes	52. meaning of language inherent in context
53. Jokes seem not to be made for writing. I noticed that people enjoy spoken jokes and that deaf people also enjoy signed jokes. I do like to read written jokes but it would not be right to ask them to translate spoken or signed jokes into written forms. It seems that signed or spoken jokes are enjoyed better than written jokes.	53. Jokes lose their meaning when pulled out of the context of their original either language.	53. difference in language-dependent content recognized
Post-Interview Comments:		
54. I do not know the slightest idea of how I had acquired ASL except for the fact that my parents, grandparents, and two siblings are deaf. My initial language was definitely ASL. I guess I absorbed the language the same way any child would.	54. She could not understand how she acquired ASL except for the fact that it was an intergral part of her family culture.	54. language acquisition an unconscious process
55. Throughout the school years I had teachers who signed and spoke simultaneously. I learned English grammar through the Fitzgerald Key and through my constant reading habits. I believe that my being an avid reader had something to do with my improved written English competency and proficiency.	55. Apparent gradual and painless acquisition/learning of English language skills in combination with enthusiasm for reading seemed to coincide with her language maturation, including ASL as well.	55. English mastery attributed to early reading experiences
56. Reading and ASL enable a deaf child to master English. These two factors seem to explain how deaf children learn	56. Convinced that deaf individuals benefit from knowledge and use of English and ASL.	56. (opinion on values of reading)

English. After having taught them for more than ten years, I have found that they appreciate the subject content taught in ASL; the educators in the field of deaf seemed to have overlooked this for a long time.		
Supplementary Excerpts	Supplementary Paraphrases	Supplementary Themes
1e. Huh. You must recall that my parents and my maternal grandparents are deaf. So my feelings about signing at the school were not exactly strange. Probably I found it odd when some people spoke instead of signing.	1e. No recollection of traumatic experiences associated with adapting to school language and methods.	1e. easy transition into school
2e. Mmm. I just do not recall any specific feelings. I suspect I felt it strange if people would even try to speak to me while knowing that I could not hear. I felt even more strange when they persisted speaking with exaggerated mouth movements supposedly to help me understand better. Yes, that is exactly it... trying to find the right word for such feelings... bewilderment, perhaps.	2e. (see #1e)	2e. oral approach seemingly unnatural
3e. Parents definitely encouraged me to read. I was proud that parents thought highly of the value of reading as compared with most other parents of my friends. I recall my parents letting me and my sisters go to the library at will. I was proud of being able to read such and such books while knowing that others had not been reading them yet.	3e. Parents supportive in encouraging her reading activities.	3e. supportive parents

4e. ASL never entered my mind when I read since I began to read at an early age. ASL was never an issue; therefore there was absolutely no connection between ASL and reading. I still think it is true today. When I read I read. I see pure English and get pure satisfaction from comprehending the content in English.	4e. When she uses one language the other language simply does not exist at least at the conscious level.	4e. ASL and English not linguistically interdependent
5e. Yes. I recall the feelings vividly. When I was in my fifth grade, that is when I was about ten, I remember how I was able to read as compared with my classmates. I looked through the school library for the thickest book there was while the others opted to chat or fool around during the library period. Eventually I moved on to heavier books such as Catcher in the Rye in the high school literature class. I was amazed how well I was able to perceive the story. Again I was comparing myself with my own classmates. They either just did not read or found reading difficult to do.	5e. Good feelings associated with her being a serious reader during adolescence as compared with peers who seemed to opt for other priorities.	5e. self-esteem good with advancing reading skills
6e. Huh. Nothing to it. Mmmm. Really I read English materials and could not fathom signing it in English order. It seems to me that this to ability to translate from printed English to signed ASL comes naturally. I suspect that anyone else would do the same without thinking of it. I read in English and absorb all the information imaginally; then the imageries come out through ASL. This is a well known phenomenon among us, I am sure.	6e. Information in printed English absorbed through reading is translated into ASL, an unconscious process.	6e. translation between English and ASL effortless

7e. I loved Archie and the other characters in this series; up to this moment I still know exactly what each of the characters would do or how they would react in certain situations. Later in my teens I realized how repetitious the comic book content patterns could be. I feel good with captioned pictures, I suspect that this was the crucial stage of my vocabulary development toward eventual ability to comprehend reading without depending on pictures.	7e. Comic book reading during childhood is still cherished as a valuable experience; comic characters still remembered in later years.	7e. meaningful childhood reading (comics)
8e. At that moment I thought nothing of repeating the content to the young boy because then I did not know any difference between the approaches used by us two teachers. No thoughts, no feelings on that situation until the teacher had expressed astonishment at my different approach.	8e. Translating information in Signed English into ASL is considered a non-issue.	8e. bilingualism, a natural phenomenon
9e. The merit of such a language teaching program was that it was repetitious. I knew it has helped tremendously as I had to go over the patterns many times for good two or three years. With my reading skills, my writing became more elaborate.	9e. Structured language program like Fitzgerald Key for childhood is still valued.	9e. structured written English approach valued
10e. It would bring out the fond memories of my schooling, early schooling. Great memories and I can remember most of the events since my first grade. If you had shown me the key, I would [illegible] to revive it within my classroom if I might.	10e. Many fond memories associated with learning English through the structured program.	10e. structured written English approach valued
11e. Yes, but writing thank you notes for the whole class after field trips could	11e. Writing on behalf of other students could be tiring but rewarding.	11e. own writing skills envied by others

be weary at times. Sometimes I felt it was unfair that I had to do it instead of others.		
13e. I envied others for their ability to speak intelligibly because, of course, they got the attention. At times I event felt embarrassed for being unable to speak. I was basically shy throughout my schooling until I was at the college. Anyway this shyness probably developed from the embarrassing experience. in that demonstration situation, I even hoped that the teachers would not force me to speak while wishing that they would let me answer some questions.	13e. She felt inadequate when her limited speech skills were implicitly compared with those of some of her classmates.	13e. speech over-valued for its worth
14e. Yes, because I always got the special treatment; I enjoyed being taken to restaurants or ice cream parlors after the stage demonstration in such meetings. I did not feel any resentment toward having to demonstrate at the presentations because never once was I asked to speak (vocally) at these presentations.	14e. (see #43)	14e. recognition of self-worth appreciated
15e. Frustrating at times with most of the interpreters because I have been noticing their inability to read my sophisticated words. You see, I mingled with hearing friends when I was young during summer time; I never had heard of interpreters. I still communicate through writing; because of this initial step, I still feel more comfortable with writing than communicating through interpreters. Furthermore, you would have to look out to make sure that they	15e. Direct person-to-person dialogue is preferred to use of interpreter to carry on an indirect dialogue.	15e. direct dialogue preferred to dialogue through interpreter

interpret your own messages exactly the way you had wanted to express.		
16e. Depending on the situation, English would appear more appropriate as in written form whereas ASL is more versatile in drama, poetry recitals, etc. So they balance out. ASL was never a choice when I was young. So maybe deaf people who are presently growing with a strong understanding of ASL should be the very people to ask to express their preference. I prefer English because I grew up with it even if I subconsciously also grew with ASL.	16e. Benefits of being ASL-English bilingual became apparent as she could take advantage of strengths in both situations. Until recently her ASL had been taken for granted while being conscious with the importance of English. Today she enjoys using either language.	16e. advantages of being a bilingual
93e. So these two languages really came hand-in-hand with my reading and writing still development. How is that for an elaboration?	93e. She enjoys benefits of bilingualism.	93e. benefits of bilingualism

Table 14

Thematic Clustering of Liz's Protocols

Themes	General Descriptions
1. Vague Recollection of Language Acquisitions: (1, 2, 3, 6, 54, 55, 1e.)	1. Liz admitted it was difficult to describe her experience of language acquisition.
2. Standardized Family Language: (2, 3.)	2. ASL was and still is the basic standardized language of her entire family.
3. Language-Based Socialization: (5, 6, 41.)	3. Peers with similar experiential background were preferred as socializing partners.
4. Supportive Parents: (7, 19, 24, 3e.)	4. Parents encouraged use of the local library facility as well as supplying her with hundreds of comic books.
5. Sibling Socialization and Support: (12, 13, 18, 19.)	5. Younger siblings were very much involved with Liz in their reading and play school adventures.
6. Early Reading, a Favorite Activity: (12, 13, 14, 15, 16, 20, 48, 5e, 7e.)	6. Favorable conditions to enhance reading enthusiasm included supportive parents, nearby library facilities and involvement of siblings in activities.
7. Easy Transition into First Year School: (1, 4, 27, 29, 36, 40, 9e, 10e.)	7. Home and school individuals used essentially the same communication method; signing but different languages (ASL and English). Liz experienced easy transition into part time living at the residential school.
8. English and ASL Separate: (6, 30, 4e, 6e, 15e.)	8. English and ASL are considered separate languages in that one does not need the linguistics of one of acquire those of the other at least on the conscious level.
9. Contextual Dimension of Language: (53.)	9. Message originated in the context of one language may not be as qualitatively similar if translated in the other language.
10. Advantages of Bilingualism: (8, 9, 18, 56, 6e, 16e.)	10. As an accomplished bilingual, she enjoys being able to use either English or ASL depending upon the nature of situation.
11. Bi-/Multilingual Flexibility: (17, 23, 28, 46, 8e.)	11. Translating between languages is deemed an unconsicous and spontaneous process.
12. Meaningful Language Activities: (35, 48, 48, 50, 15e)	12. Learning to write and read is pre-adolescent days was qualitatively dissimilar to the use of such skills during adlescence and adulthood. In the later

	phase those skills are appreciated more.
13. Language and Cognition: (18, 21, 22)	13. Symbolic languages like ASL and English seemed non-existent in her thinking processes.
14. Language and Self-Concept: (1, 41, 14, 25, 26, 27, 43, 44, 5e, 11e.)	14. Self-esteem is either positively or negatively affected by the way her personal language skills are appreciated.
15. Changes during Adolescence: (11, 34)	15. Reading and language awareness became more important during adolescence. In pre-adolescent days she wrote but did not have much use for it.
16. Appreciation of Language: (51)	16. English had been admired as a very powerful language to have and master; ASL was then seen to be powerful as well.
17. Speech: (38)	17. She recalled having a good attitude toward speech lessons; today she felt she could mouth words properly enough for a lipreader to understand.

Note. Numbers in the parentheses refer to the themes in Table 13.

Table 15

Higher Level Themes and Descriptions

Themes	Descriptions
1. Natural Language Acquisition: (1, 2)	1. Natural process of language acquiring is something one would not find easy to remember as an event of bygone years. It is so spontaneous that one loses consciousness of it.
2. Support System: (4, 5)	2. Liz's support system was consistent at home and school; people in the two principal areas used the same method of communication. Additionally her parents were firm believers of English language activities.
3. Self-Directed Language Activities: (6, 12)	3. Meaningfulness of learning seems to correlate closely with the vigor of self-directedness and determination.
4. Orientation to Second Language: (7)	4. Liz experienced a smooth transition from home to school; high degree of readiness for school was evident and probably related to the solid language experiences in preschool days.
5. Bilingualism: (10, 11)	5. Both ASL and English are perceived as separate languages with similar functionality. Bilinguals use either one depending on demands in situations. Reading easily discussed in ASL.
6. Language and Cognition: (13)	6. ASL and English seemed nonexistent in her thinking as well as when she was reading novels or watching TV.
7. Self-Concept: (14, 15, 16)	7. Self-esteem remained essentially intact except in situations in which teachers preferred those with better speech skills.
8. Socialization: (3)	8. As a child Liz recalled having particular peers as her friends; her friends had background experiences and language which were similar to hers.

Note. Numbers in the parentheses refer to the themes in Table 14.

Table 16

Common Themes and Descriptions

Themes	General Descriptions
1. Spontaneous Language Acquisition: (3)	1. Liz's data imply that humans are predisposed to acquire and use a language so spontaneously that they are unaware of it. This acquisition occurs regardless whether it is English or ASL.
2. Language and Accessibility: (1, 2, 8)	2. Liz's experience shows with a clear language and communication method, participation in the world is spontaneous, permitting the child to develop according to her perceived relationships with others in her environment.
3. Self-Esteem and Learning: (7)	3. With good self-esteem, the child simply goes on learning and living and remains in synchromesh with her developmental expectations.
4. Spontaneous Bilingualism: (4, 5)	4. With the confidence in use of either first or second language, she simply switches between them without even thinking about it.
5. Language-Independent Thinking: (6)	5. Language (either ASL or English) seems to play no part in thinking and even in the thinking aspect of book reading and TV watching.

Note. Numbers in the parentheses refer to the themes in Table 15.

Synthesis of Liz's Experiential Structures

Introduction

This synthesis is based upon reflections and interpretations on Liz's lived-experiences as analyzed through Tables 13 to 16. The headings in the synthesis reflect the characteristics of the information in the paragraphs rather than corresponding to the themes presented in the tables.

Accessible World

Liz's world has been visually accessible ever since birth since she was born deaf to an all-deaf family. (Many of her relatives were deaf, too.) Her deaf parents were prepared for Liz's deafness and the family sign language (ASL) eventually became her spontaneously acquired language. The quality of her preschool world was comparable, in terms of accessibility, to that of a hearing child having an all-hearing family living in hearing neighborhood.

Spontaneous Language Acquisition

When Liz was asked to describe her language acquisition during her childhood, she admitted she was not sure how she could answer the question (13.1). One may conclude that Liz had acquired the family language so spontaneously in her childhood that it had never been a part of her consciousness. On the other hand, it would be more likely for a person to recall and describe the experience of learning language skills in structured lessons than that of spontaneous language acquisition. Such persons may

experience the anxiety related to having to modify their language and communication methods. When the persons have to modify their language/communication methods, they may experience long term learning anxiety.

Transition into School Life

She started school with a well established language and socializing skills (13.5). At the residential school for the deaf the staff members and students used the same method of communication (signing) and Liz did not need to adjust hers. Everybody signed at home and everybody signed at the school where she lived during week-days. To her, schooling was more like an enhancing process in which her preschool values were supported.

Communication and Language Parity/Disparity

The method of communication at her home and school was similar even though the languages were different. Her transition from ASL to English at school seemed to be easy for her in her first and subsequent years at school. Liz suspected that the staff members used different variations of signed English while the students' signed in ASL. Liz did not really seem to be affected by the language disparity. It is possible that Liz did not experience second-language learning anxiety because of the strength of her preschool language at home, the common language with peers outside the teachers; jurisdiction and her socializing experiences and skills (13.5).

Spontaneous Bilingualism

Without realizing it Liz was already in the process of becoming bilingually experienced with ASL and English, English having begun in her first year of school. In the classroom English was emphasized but ASL was allowed outside. She recalled having no difficulty in switching between her learning of basic English skills inside and ASL outside the classroom.

Language-Based Selective Socializing

When Liz was around six she and her best friend, also a deaf child of deaf parents, were selected as research subjects. The researcher encouraged them to "sit down and just talk to each other" (13.41). He was apparently interested in Liz and her friend's language and social skills as well as in the content of their conversation. Liz recalled having a great time talking and talking with the friend. It seems likely that meaningful socialization may be linked to common interests developed through having similar home and language backgrounds.

Early Reading Experiences Valued

Liz doubled that her having deaf parents had much to do with her advanced language performance with English during her adulthood. She pointed out that her English mastery in adulthood might be attributable to her early reading experiences (13.14). Her school teachers and parents encouraged her to read during her childhood.

As an external observer I would tend to suggest that her parents

played an indirect but significant role in her acquisition of English language skills through making available to her a functional language (ASL) in her preschool years. Her reading enthusiasm could be construed as a manifestation of having confidence in a functional language.

Interactive Siblings

Liz's siblings were very much involved in the reading and play-school kind of activities with her. During her preadolescence her teachers challenged her and her siblings to take part in summer reading contests (13.12). They brought library books home and read them on a regular basis. These girls also tested each other with their own quizzes. On the side they also read piles of comic books during their childhood. As they grew older reading became more meaningful. This scenario clearly shows that siblings do have an important role in supporting pursuits of constructive goals.

Bilingualism, a Cognitive Process

Although Liz denied that she needed her ASL to develop her reading skills, she used it to discuss book content with her siblings. In reflecting upon her perspective, I would tend to agree that the mechanics of one language are not needed to support the learning of the mechanics of another but the confidence with the first langauge is necessary for learning a subsequent langauge.

Spontaneous Bilingualism

She simply learned to write and read English and used ASL at other times without having problems in translating between the two languages. She had read a thick novel printed in English in one night and then retold the story to her siblings in ASL (13.18). This performance suggests that the ability to grasp that much information originated in one language and retell it in another is a manifestation of comprehension. Spontaneous bilingualism may be construed as one of the other manifestations of language-independent cognitive processes.

Language and Thinking

ASL and English seemed to be nonexistent in her thinking. Even though she read novels in English and retold the story in ASL, she claimed that words did not exist in her thinking during her reading (13.21). Words or signs seemed to become insignificant while she was reading or watching TV. The process of switching between languages also seemed to be language independent. One does not need a language to mediate and facilitate switching between two languages.

Self-Esteem

Liz's self-concept and language relationships remained essentially intact except for certain moments in her classroom during her adolescence. With visitors in the room she noticed that her teacher would pick out certain classmates with good speech skills to take part in question answering

demonstrations. Liz's self-esteem was negatively affected as she sensed the teacher's opinions about her were based on her limited speech skills (13.13e). She escaped the predicament by picking up reading materials. She wished that the teacher had allowed her to show her intelligence by answering questions through her sign language. The teacher still preferred speech demonstrations even though s/he knew Liz would have given good responses. In reflecting on this scenario, I tend to suspect that the teacher was an inefficient communicator who would not want the visitors to find out that s/he could not read and interpret Liz's responses in sign language.

Language Consciousness

As an adult Liz enjoys mastering English and still feels that there is a lot more she could learn about it. This suggest that her former teachers had stressed that a good command of English would be necessary without stressing that a good command of ASL would also be important. At one point Liz indicated that she preferred English to ASL but soon realized that both have their own strengths.

(After having read through his synthesis, Liz wrote the following statement: After Deaf Way I have completely different perspectives about English and ASL. ASL has won a plenty of respect now. But at the point of analysis, I respected English more...not anymore. So basically your last statement is satisfactory.) Deaf Way was an international event held in Washington, DC in July 1989. Deaf and hearing speakers from around the world shared studies and perspectives on different aspects of deafness.

Over 6500 deaf and hearing people from many countries registered for the event.

Table 17

First Level Thematic Analysis of Norma's Protocol

Excerpts of Norma's Protocol	Paraphrases	Themes
1. My childhood experiences were rich due to the encouragement of parents, their love of reading (always encouraging use of dictionaries, encyclopedias and novels ...) and my early school experiences.	1. Strong language base in family during childhood with a lot of quality language use.	1. supportive parents
2. I feel successful in this regard mainly due to a fluency with my native language. Also my competency is based on my ability to read and comprehend any English text presented except for highly technical materials which requires specialized knowledge.	2. Confidence with language and language method use in adulthood attributed to the early childhood foundation.	2. confidence with own language
3. Learning of ASL is an ongoing process primarily through interaction with H.I. individuals. I took a sign language course and began socializing right away. I learned more formal structure of the grammar and placement of words in the course, whereas, I learned the practical application and usage of ASL in the cultural context more from direct assocation within the Community.	3. Second language (ASL) learning is regarded more as a natural, rather than mechanical, process.	3. new language learned best in context
4. An ongoing process of learning presently involves being attentive, asking questions of new signs presented, continued involvement in Deaf Community, regular interpreting assignments (which are practice), and	4. Personal convictions and enthusiasm essential in sucessful second language acquisition.	4. openness to continual learning

attending workshops in the field of interpreting use of ASL etc. I still consider myself a "Novice", albeit an "Experienced Novice".		
5. I do not recall any rote drill type work. Perhaps in my earlier days I tried to remember lists of vocabulary words. But I was one of the lucky ones who picked up the concepts quickly with a good memory and good manual skills; all combined with a keen interest helped me to progress very quickly in L2.	5. Her own second language learning style is described as a natural process; she did not feel she needed to be taught.	5. lack of trauma in language learning
6. Frequently, after I had been exposed for a few months and had a good conversational level - yet before I knew many H.I. individuals - people asked me if I was Deaf, or assumed I was Deaf probably due to my expressive and receptive skills. That happened often (earlier) before the community began to know me. And still occurs (to a much more limited extent) when travelling and meeting new Deaf people.	6. Bilingual acquisition is more a self-determined process; it does not need to be continuously led by others.	6. language/ personality co-constituentality
7. Similarities seem few. Some ideas might include words with dual meanings (such as "run" in English and the ASL classifier sign for "vehicle" - specificity must be determined in context).	7. Comprehension of equivalent semantics in both languages is enhanced by clear grasp of words or signs on context.	7. language quality linked to experience
8. The ability to play with words and manipulate them for humorous purposes or emphasis is available in both L1 (first language) & L2 (second language). Both L's have idioms distinctive to the individual L. Both allow limited, especially short term,	8. Comprehension of semantics in either language is context-dependent.	8. awareness of advantages of bilingualism

invention of new words. Both L's develop added meaning via use of inflection. Both are flexible in choice of a variety of expressions (words) available to the user. Ability to initialize in both L's is available.		
9. I would agree that L1 and L2 are similar in functions such as ability to convey thoughts, meanings, intent, emotion, to share experiences.	9. Language is perceived as a function rather than language per se.	9. awareness of language functionality
10. At times ASL is very superior to English in linguistic potential such as expression of highly abstract concepts.	10. Appreciation of two distinctive languages.	10. advantages of bilingualism
11. Yes, first thought and the most comfortable process for me is to visualize individual words in my mind.	11. Words are visualized in the mind.	11. visualization of words
12. L2 made me more interested in L1 - syntax, grammar, usage ... Yes, I feel that my L1 is made more flexible and has broadened my base of overall appreciation of differences by knowing L2. I can relate L2 situations or usage and apply these to L1 interactions thereby expanding versatility.	12. Being bilingual is equivalent to being liberated from the bondage of single-language structures and consciousness.	12. interactive effects of bilingualism
13. I cannot say honestly that I always consciously think of components during usage though sometimes I do - especially during discussions of L1, L2, interpreting.	13. Whether she thinks with language components cannot be ascertained.	13. language and cognition sometimes unconscious
14. Most times, thought patterns are built in my mind, words and sentences, prior to expressively using these. Even when I say dumb things, which	14. When conscious with the need to state words carefully and deliberately, words are preformed in the mind.	14. language consciousness

happens sometimes, I have thought out the individual words before they are blurted out. You would think this should help in preventing me from saying something unintentionally but once the flow is set it is difficult to intercept!		
15. L2 has led me to becoming more interested, linguistically, in L1 and L2 which has therefore caused me to research more into L1. I would agree that overall maturation and involvement in this field has contributed more toward an interesting L1 lingual competency.	15. Appreciation of one language leads to appreciation of another.	15. bilingual enrichment
16. Switching from L1 to L2 or vice versa is very unconsciously done. It is not a mental process of stop, think, switch etc. It is more an innate understanding of the need to use one versus the other. "Stress & strain" are not words I would associate with a switch from either L; "consciousness" vs. "spontaneity" perhaps. In fact the switch rom L1 - L2 occurs spontaneously in dreams as well with no thought o transference.	16. Switching between two languages is rather an unconscious and spontaneous process.	16. bilingual spontaneity
17. The biggest difficulty in acquiring L2 are 2 cultural ones - 1) being able to detect subtleties/ nuances of L2 and 2) being able to understand and utilitze L2 humor. Many meanings which are limited linguistically can be overlooked by myself unless I am well-acquainted with the person communicating.	17. Language is related to the context of usage.	17. contextual bilingualism
18. I relate to a lack of cultural experience/exposure and an immaturity with L2	18. Comprehension is contextually related; language symbols do not	18. bilingual experiential disparity

which will improve with time. comprehension is <u>not</u> the difficulty, more so in humor and its use within L2. Timing of jokes, for which I am also poor in L1, particularly humorous signs and the flow of a funny story seems lost to me and is a continued source of frustration requiring practice. Both difficulties are <u>very</u> slow in resolving themselves. further, I am not convinced that either will <u>ever</u> be resolved fully.	exist in isolation without losing their meaning.	
19. Starting with L2 would have produced better but it probably would have produced at the same present L1 level, assuming all the previously mentioned early influences still occurred.	19. Whether one starts with language A or language B makes no difference.	19. opinion; assumption
20. As we had discussed earlier, I often dream in L2 or both; I will dream that I am an L2 native user (less frequently). I also dream that H.I. people become "hearing" - through no miracle; simply they <u>are</u> hearing all of the sudden. I also dream that I am H.I. myself - frequently.	20. Dream language choice seems to be related to language consciousness especially during a language learning process.	20. second-language consciousness
22. I often use L1 and L2 interchangeably as convenience dictates. In other words, situations may arise which, although I have the option to use either L1 or L2.	22. Bilingual flexibility is enjoyed.	22. bi-multilingual flexibility
23. I often find certain phrases or idioms are expressed better in one language than in the other. And, to my dismay, I find myself stuck trying to explain a perfectly appropriate ASL idiom to a hearing person who does not sign.	23. Versatility and flexibility of each of the two different languages are noticed and taken advantage of.	23. bi-multilingual flexibility

24. When I initially began developing L2, I had many friends who were not from my L2 associations and who did not understand or were even interested in L2. Those friends have since "fallen by the wayside" to the point where I no longer associate with anyone who doesn't understand, even minimally, my L1.	24. Unilinguals seem to be threatened by bilinguals.	24. language and social relationships
25. A final thought relates to my perceived feeling of frequently being "tested" as to my L2 competency. I often get the impression that many L2 natives regularly "evaluate" my skills, for their own interest or whatever. Sometimes this causes uncomfortable, pressured communications when one feels as if you are being "sized up".	25. Second language users feel being watched and monitored by native language users.	25. second-language consciousness

Table 18

Thematic Clustering of Norma's Protocols

Themes	Descriptions
1. Supportive Parents: (1)	1. Parents encouraged early nursery school and play school experiences for Norma when she was young. They were also highly interactive and responsible in assisting with homework. They were strong believers of literacy and encouraged Norma to make maximum use of materials in English. They were also perceived as positive role models.
2. Language Acquisition: (3, 4, 5, 19)	2. The process of acquiring the language of the family and community was so smooth and spontaneous that it became one of the inherent aspect of Norma's personality. (Norma also learned ASL as her second language with much gusto.)
3. Bilingualism: (4, 6, 8, 16, 17, 22)	3. Norma simply went ahead and learned ASL through socialization with deaf individuals after having completed an initial course. ASL learning is thought to be an ongoing and nonmechanical process.
4. Language Knowledge/Use: (7, 8, 9, 12, 15)	4. Eventually ASL was appreciated so much that its linguistic characteristics are noted and respected as being different from those of English. Contents of language, like jokes and idiomatic expressions, are respected best in their original context.
5. Language and Context: (11, 13)	5. Words are visualized in the mind during thinking processes; however they are either preformed or premeditated prior to explicit expressions. ASL, rather than English, seemed to have been perceived in her dreams.
6. Language and Self-Concept: (3, 8, 17, 18, 23)	6. ASL and deaf culture are perceived as inseparable constituents meaning that Norma quickly captured that it would be best for her to learn ASL in natural situations.
7. Accessible/Inaccessible Worlds: (24, 25)	7. As she became a reasonably competent ASL/English bilingual, she noticed a change in her social relationships. Former acquaintances seemed to be dropping out. Also as a new ASL user she felt she had been "tested" to ascertain whether she had been using it properly or not, particularly during the learning of ASL phase.

8. Readiness for Learning: (4, 6)	8. Norma's experiences indicate that accessbility/inaccessibility to the world is language rather than sensory related.

Note. Numbers in the parentheses refer to the themes in Table 17.

Table 19

Higher Level Themes

Themes	Descriptions
1. Language Acquisition/Use: (2, 6)	1. Language learning is experienced as ongoing and contextually dependent; this also applies to the second language learning process.
2. Language Awareness: (4, 8)	2. Differences between English and ASL are respected.
3. Supportive Family: (1)	3. The essence of parental support manifests itself in the child's performance with the first or subsequent language in later years.
4. Language and Cognition: (5)	4. Norma believes that words are preformed and premeditated in thinking processes.
5. Bilingualism: (3, 8)	5. Advantages of ASL/English bilingualism became evident. Language switching to fit in the situation is effortless even though some difficulty is experienced in interpretation of content from one to the other.
6. Self-Esteem: (6)	6. Norma enjoyed the confidence with her language use as well as with her ability to learn and use ASL as a second language.

Note. Numbers in the parentheses refer to the themes in Table 18.

Table 20

Common Themes and Descriptions

Themes	Descriptions
1. Language Spontaneity/ Confidence: (1, 2, 6)	1. Language acquisition becomes spontaneous and natural when everyone seems to be using it as his/her basic social language in a here-and-how social context. Confidence underlies a good attitude with first and subsequent languages.
2. Attitude Toward Language: (1, 5)	2. While Norma was learning ASL as her second language, she felt awkward with it. After she had been using it for a while, she began to feel more comfortable with it.
3. Bilingual Flexibility: (1, 3)	3. One may infer that the individual who enjoys good relationships at home is likely to enjoy relationships with other people elsewhere.
4. Communication/ Relationships: (4)	4. Norma believed that words were used in her thinking, particularly when she had to be careful with what she had to say in certain situations.
5. Language Consciousness: (2)	5. Norma recalled being "on alert" for experienced signers' opinions on her newly acquired signing skills.
6. Language and Thinking: (4)	6. Norma perceived that words were used in her thinking, especially when she needed to be careful with what she had to say.

Note. Numbers in the parentheses refer to the themes in Table 19.

Synthesis of Norma's Experiential Structures

Introduction

This synthesis is based upon reflections and interpretations on Norma's lived-experiences as analyzed through Tables 17 to 20. The headings in the synthesis reflect the characteristics of the information in the paragraphs rather than corresponding to the themes presented in the tables.

Supportive Parents

As a hearing-born child Norma grew up with her hearing parents who gave her all the support and encouragement needed to maximize her acquisition and use of the spoken family language. With this type of support, she enjoyed her childhood. They also encouraged her to read and use reference materials when Norma was older. As an adult she articulates well in her professional work. Norma's experience may demonstrate that the effects of a supportive family continue into adulthood.

Optimal Language Acquisition

At a point during her early adulthood she took an ASL course for the first time and she soon became very active in the Deaf Community. She had decided that the way to acquire ASL would be through meaningful interactions with deaf individuals. Within a short period of time she became so good with ASL that some deaf individuals were not sure if Norma was deaf, too. Her experience suggests that a person must become involved with

people in order to appreciate their language and cultural values. Because she wanted to become involved in the deaf community, she readily started learning and using the sign language.

Spontaneous Bilingualism

Her positive orientation to sign language seemed to have roots in how her parents supported her language and literacy growth during her childhood and adolescence. This phenomenon implies that humans with happy first language experiences are predisposed to acquire one or more subsequent languages with a good attitude toward others' language and culture.

Norma's pattern in becoming a bilingual seems to suggest that her first language mastery facilitated her acquisition of ASL as a second language. It seems that her attitude toward herself and others rather than her language competency per see accounts for spontaneous bilingualism. With this observation, one may infer that spontaneous bilingualism is related to socialization. When a person enjoys socializing with people, s/he tends to enjoy using one or another language as well.

Second-Language Consciousness

Norma enjoyed learning and mastering ASL during her late adolescence and early adulthood. From time to time she admitted being sensitive toward how others felt about her signing quality but she was usually prepared for any constructive criticism. In noticing that she had become a favorite English-ASL interpreter in the deaf community one may suspect that

her second-language consciousness precluded her from becoming complacent with her signing skills. This consciousness seems to be related to the first-time learner's anxiety associated with learning and trying something new. Before Norma had gained much confidence with her signing skills, she felt that deaf signers had been evaluating her signing quality.

Language and Thinking

She was uncertain whether her thinking was language-dependent or not; however she believed that she had to compose words in her mind before making serious statements. There were times when Norma used ASL in her dreams. How these two processes are related may be difficult to establish. She believed that words were necessary for thought but this could not explain her ability to discuss things in ASL. If it is assumed that words are end-products of thought, it would be possible to suggest that ASL signs were end-products of a deeper cognitive process. This means that thinking functions on its own.

Bilingual Competency

Although she enjoyed being a bilingual with ASL and English, she encountered some difficulty in interpreting the informational content of one language into an equivalent content in another language. This suggests that comprehension of information in one language has to be accomplished before it is represented in another language. In other words for one to become bilingually competent, one must also become familiar with the culture of the

particular language community.

Bilingual Versatility and Flexibility

When she was in the proximity of ASL users, she simply used their language and switched to English when she was with English users. Choice of language is contextually dependent and a bilingually competent person simply blends in with the users of either language.

As she became bilingually experienced and competent, she noticed a change in her old friends' attitudes toward her. Their friendship seemed to be strained. It would be inconceivable to suggest that her becoming bilingually versatile and flexible had made her become less friendly. Instead it could be that her friends became threatened by her greater freedom with language and their inability to share it. Norma had the option of becoming involved with either English-speaking hearing people or ASL-signing deaf people.

Table 21

First Level Thematic Analysis of Ette's Protocol

Excerpts of Ette's Protocol	Paraphrases	Themes
1. (French and English bilingual) Yes, that is correct.		1. spontaneous acquisition of familial language
2. My first language was French. When I started school I knew only French; fortunately, school up to grade 3 was mostly French, therefore I developed a first language very well.	2. Mother-tongue established in first years of life.	2. primary language in early childhood
3. When I began grade 4 there was more English - from grade 1 to 3 - I succeeded very well in school - I had very high grades but when there was a requirement for another language then I did not do as well in school and that affected how I saw myself.	3. Considerable adjustments required for learning of a second language in elementary school; level of confidence disparity with her first language.	3. adjusting to second language in immersion program
4. I was very sensitive to speaking well and to making sure people understood me (especially with friends) when I would say something with the wrong accent, they would laugh - it would make me slow down in trying to learn.	4. Language consciousness seemed to increase with efforts to use the newly-learned second language.	4. second-language self-consciousness
5. When I continued in English in Alberta where, of course, English is the language to learn. All of my schooling up to grade 12 (grades 4-12) was mostly in English but still I had some classes in French so I kept both languages.	5. Total immersion in the second language atmosphere with occasional involvement with the first language.	5. becoming bilingually experienced

6. In my family we mostly spoke French. My grandparents did not know English and they taught us to be proud of speaking French but sometimes I still feel that I was different from other people. I did not always see it as an advantage.	6. Consciousness of being different due to different use of languages was more apparent during adolescence.	6. feelings associated with severance from first language
7. I was self conscious especially as a teenager and it made me even more shy.	7. (see #6)	7. second language and self-consciousness
8. After grade 12 I had to make a decision to either go to University or become a sister. It was easier for me to be a sister because it would be in French.	8. Own decisions made when facing a choice of returning to the first language community or venturing out in the second one; volitional action.	8. language choice made with confidence
9. I was afraid of university therefore I went down east to Quebec for five years and there was all in French. Also the people I was with spoke only French and I spoke two languages. So my French was not the same as theirs so again I was different that makes me upset.	9. Her feelings toward the first language seem to change as she became bilingually experienced.	9. separation from home language anxiety
10. In Alberta my English teachers would say my sentence construction was French and in Quebec, my French teachers would say my sentence was English. So there was a mixture; I was different from a total French or total English.	10. Language awareness involved an insight into the perspectives of native language users on quality of language method use.	10. anxiety related to language limbo
11. I enjoy reading a lot. I did not have problems; I read as much in English as I would in French. The problem lies in the production of the language.	11. Reading is being regarded as an enjoyable activity; however, production of information in written second language is not as enjoyable.	11. reading, an enjoyable activity
12. After a few years in Quebec, after hearing French and practising I would be better at being French and there would be	12. Quality of spoken language improves when in the context of the same language atmosphere for a considerable length of time.	12. quality of speech socially contextually dependent

less of a mixture.		
13. When I came back to Alberta I had to reanglicize myself since I became a teacher for native children which was all in English. In the context with the years that I developed the English language.	13. (see #12)	13. (see no. 12)
14. Sometimes I still feel self conscious. I have to stop and think. Is this English or is this French?	14. As she became more confident with language, she became less language conscious.	14. diminishing awareness of language itself
15. At my work right now, I work in French at the University X, in this context I think in French. Here where I study English in my classes, in this context I think in English.	15. Thinking in the same language that is prevailing in the explicit context.	15. thinking involves either language
17. If in a context like here, I think in English, I am not tempted to speak in French, French words do not come. When I am at work, more English words come. That's true, maybe because of society around. It is a bilingual place. When I am with people who know both languages, I use both.	17. Inter-language switching is spontaneous and automatic for the individual with sufficient bilingual skills; language choice is a response to the language choice of others.	17. a bilingually competent switches and adapts
18. It depends on which word comes first in conversation. When we talk about studying, English words come first. When I am taking about something at work, French words come first. If talking about family especially the past, French comes first.	18. Bilingual switching is a relatively unconsicous process for the bilinguals.	18. language choice, contextually dependent
20. I did not learn English before I started school. When I was 5 1/2 I was fortunate my grade 1 and 2 were in French so I learned to read.	20. Second language learned at school; affinity with mother-tongue language.	20. affinity with the first language
22. Some married English speaking partners; some of	22. Loss of the first language through	22. threat of absorption

them married French. If they marry English speaking partners, an effort must be made to maintain French in the house because you can lose it if you don't use it.	incorporation into the second language atmosphere feared; consciousness of language values.	
23. Sometimes you have to be sensitive to those who only understand one language; therefore so we make sure only to speak French only at home with the family (when those around speak French).	23. Language choice of a bilingual depends on the need of others.	23. confident in being bilingually competent
24. One time my sister-in-law came out to a baseball game and she was the only one who did not speak French. There were others who spoke French and she felt left out so we try not to (on purpose) to exclude people - but sometimes we like to speak.	24. Unilinguals may find themselves in a precarious position in the company of other-language users; single-language rigidity.	24. bilingual as threat to security of unilingual
25. Maybe because I was in an environment where I taught Cree children and some grandparents knew Cree and at times I did not understand - I now know what it feels like to be left out.	25. (see #24)	25. effects of lingual alienation, two world exclusion
27. Mostly pictures. It depends on who I dream about - probably mostly English because of my situation here in Edmonton.	27. Dreams seem to be explicitly language independent language in dreams not easy to identify.	27. imaginal processing

Table 22

Common Themes and Descriptions

Themes	Descriptions
1. Language Choice: (5, 8, 20)	1. Ette switched from French academic program to that of English speaking community after the end of grade three and chose to remain with English rather than returning to French speaking pursuits. She decided which language to use.
2. Self-Esteem: (4, 7, 10, 12, 14)	2. Affinity with her first language, French, was so strong that she feared losing it. She has been sensitive to others' feedback on her accent and perplexed with conflicting comments on her French and English.
3. Solid Family Language: (1, 2, 6)	3. French language was the pride of her family; her siblings remained loyal to it. Ette enjoyed the advantage of having a strong language background with French.
4. Bilingual Flexibility: (3)	4. Ette's bilingual experiences started with the switch from French to English as has been making good adjustments with her new language with occasional return to the French-speaking community.
5. Reading: (11)	5. Novel reading (in English) has always been enjoyed.
6. Language in Context: (13, 20, 23)	6. When in English speaking community, she used English; French, French. Rather than imposing her choice of language on others, she switches to meet others' needs or single-language skills.
7. Language and Cognition: (16, 17, 18)	7. It appeared to Ette that she thinks with either French or English depending on where she is.

Note. Numbers in the parentheses refer to the themes in Table 21.

Table 23

Higher Level Themes and Descriptions

Themes	Descriptions
1. Language Autonomy: (1)	1. She chose the language as she felt she would most likely use in the future.
2. Supportive Family: (3)	2. Solid family with solid first language experienced as a bonus.
3. Bilingualism: (4, 6)	3. Ette was prepared to adapt to the new language community as well as to adapt to other individuals' language limitations.
4. Bilingual Versatility (3)	4. The process of switching between French and English was so unnoticed that she simply responded to others with either one.
5. Self-Esteem and Language: (2, 3)	5. Loss of contact with her mother-language was a cause for anxiety. As a developing English/French bilingual, Ette became wary of others' "checking on" her accent and usage of the new language.
6. Language and Cognition: (7)	6. Thinking occurred with or without either French or English words; some imaginal processing occurred in her thinking and dreams.
7. English Skills: (5)	7. Ette enjoyed reading materials printed in English. She spoke English with confidence but was wondering if her French accent was noticeable or not.

Note. Numbers in the parentheses refer to the themes in Table 22.

Table 24

Common Themes and Descriptions

Themes	Descriptions
1. Language Spontaneity/ Freedom: (1, 7)	1. How one goes about learning a second language is determined by how prepared s/he is for it. As long as there is a meaning in learning the new language, she is willing to pay the price of temporary severance from her first language.
2. Self-Esteem: (5)	2. There are times during the learning phase of second language acquisition in adolescence where the person experiences some uncertainties, especially regarding others' perceptions about her attempts with it.
3. Bilingual Flexibility: (4)	3. Bilinguals seem to sense greater power through being able to handle two languages relative to their perception of how restricted the experiences of unilinguals are.
4. Communication/ Relationships: (2, 3)	4. Language and social interactions are definitely interdependent; meaningfulness of language depends on the context in which it is used.
5. Language and Thinking: (6)	5. Ette seemed to be thinking in French in French-speaking community and English in English-speaking community.

Note. Numbers in the parentheses refer to the themes in Table 23.

Synthesis of Ette's Experiential Structures

Introduction

This synthesis is based upon reflections and interpretations on Ette's lived-experiences as analyzed through Tables 21 to 24. The headings in the synthesis reflect the characteristics of the information in the paragraphs rather than corresponding to the themes presented in the tables.

Language Spontaneity/Freedom

Ette was born into a French speaking family. French was her basic language until she started her English-based education in her fourth year of schooling. Although English was new to her, her main methods of communication remained essentially intact. Spoken French and spoken English are based on the sound produced through the same speech organs and heard through the same organs of hearing. The world of the hearing remained accessible to her due to the similar mode of access. Ette enjoyed successes in her first years of schooling in French but experienced some difficulty in adjusting to English in her fourth year (21.3). Her grades were not as good in that year as they were in the first three years. Apparently she adjusted well with the new language since her English-based education continued into English-based university programs. At one point she had to make a decision whether to enrol in an English-speaking university or study to become a sister in a French-speaking program (21.9). She chose to continue with English while maintaining contact with French through courses

and visits with her French speaking family members (21.5 & 21.6). Ette's experience indicates that she had transcended from a language consciousness which means that she was not limited by a single language (21.23). A "lingually liberated" person uses a language as one of means to an end, rather than as the means to an end. Ette could chose to take part in either the English- or French-speaking community and switch to either language depending on the social context (21.18).

Self-Esteem

During her adolescence she was sensitive to how listeners had reached to her accent in an English-speaking community. Also she became concerned when her old acquaintances remarked that she was not as French as she would have been had she remained in the French-speaking community (21.6). She experienced a temporary inconvenience which was attributable to her lack of experience with the new language (21.3). As she proceeded through her higher education, her "new-language anxiety" must have diminished or she would have returned to live in the French-speaking community. She became language-conscious particularly when she sensed that her French was not as natural as the French of her relatives in the French-speaking community (21.4 & 21.6). Self-identity and French culture relationships seemed to be important to her (21.22). (As a deaf person I am not sure how important accent is to hearing people in a new language community. From reflecting upon Ette's experiences, it seems that accent is more important to hearing people than to deaf people.)

Bilingual Flexibility

Ette's data show advantages and disadvantages of bilingualism. As a bilingual, she felt that she was not as good with French as the French-only speaking individuals. She knew that her accent had changed during her absence from the French-speaking community. These disadvantages (e.g. 21.6) seemed to be insignificant as compared with the following advantages. Ette had been able to function in both English- and French-speaking communities (21.18). While visiting with her French-speaking family, Ette became aware of her bilingual versatility and flexibility when she realized that her sibling spoke French only. As compared with one of her siblings, Ette might describe herself as being more lingually flexible (21.24). Bilingual flexibility suggests superior language competency. Ette's apparent bilingual flexibility might have basis in how she started learning English as a second language. Some people started learning a new language because they wanted to and others started learning under duress. Ette made her own decision to pursue her education further in English. She was apparently attitudinally and mentally prepared to start her English program (21.13). Today as an adult she enjoys reading materials in English (21.11). Currently, her bilingual skills have become so natural that she has lost consciousness of either French or English (21.14). She simply switches between English and French depending upon the language choice of other individuals or groups of individuals relatively unconsciously.

Language and Thinking

There were times when she was uncertain whether English was "used" in her dreams and thinking or not (21.14). She suspected that she used either language in her thinking, English in English-speaking community or French in French. During a new-language learning phase, the learner tends to experience an anxiety associated with a lack of confidence with the new language (21.4 & 21.7). This experience suggests that once a person has gone beyond the language learning phase, s/he tends to become less language-conscious (21.23). This assumption encourages the belief that thinking with a societal language is only an illusion associated with the anxiety of new language learning experience, especially during adolescence. It may be similar to the experience in driving a car for the first time. The new driver would be very aware of the steering wheel, the brake and accelerator pedal and the sensation of being in a moving car. An experienced and confident driver might have travelled from point A to point B without realizing that s/he had driven the car. It should be more likely for a person to have language consciousness with a new language than with his/her first language.

Table 25

D. Second, Third and Fourth Levels of Thematic Analyses

Second Level Thematic Analysis	Third Level Thematic Analysis	Fourth Level Thematic Analysis
Rosa's Table 2 Thematic Clustering	Rosa's Table 3 Higher Level Themes	Rosa's Table 4 Common Themes
1. Rudimentary Oral/Gestural Communication (1, 2, 3, 1e, 2e, 13e)	1. Deaf Adult's Role (10)	1. Supportive Network (2, 3, 11)
2. Visually-Based Communication (4, 5)	2. Supportive Family (3, 6)	2. Schooling (8, 9, 15)
3. Supportive Parents/Family (23, 31, 1e)	3. Language Orientation (1, 2, 5)	3. Self-Esteem (8)
4. Speech Attempts (6, 7e)	4. Language and Cognition (11)	4. Sibling/Deaf Adult Mentorship (1)
5. Indigenous Bilingual Experiences (6)	5. Spontaneous Bilingualism (6, 12, 13)	5. Meaningful/Relevant Learning (7, 8)
6. Significant Siblings (3, 5, 31, 3e.)	6. Communication/ Relationships (6)	6. Bilingualism (3, 5, 8)
7. Self-Concept and Language (7, 8, 19, 26, 36, 5e)	7. Reading Experiences Valued (8)	7. Language and Thinking (4)
8. Reading During Adolescence Valued (14, 16, 22, 17e)	8. English, Written and Speech (4, 14)	8. Communication/ Relationships (6, 1)
9. Schooling (11, 12, 32, 9e, 10e)	9. Schooling (9, 14, 15)	
10. Deaf Mentor (13, 19, 33, 13e, 14e, 20e)	10. Self-Concept (7, 15)	
11. Cognition, Imaginal Processing (15, 21, 24, 8e)		
12. Advantages of Bilingualism (18, 20, 27, 18e, 19e)		
13. Bilingual Fusion/Flexibility (28, 29, 15e)		
14. English Language Learning (10e, 21e)		
15. Relationships with Hearing Teachers (3, 12, 12e)		

(table continues)

Gofer's Table 6 Thematic Clustering	Gofer's Table 7 Higher Level Themes	Gofer's Table 8 Common Themes
1. interdependence of Communication and Relationships (9, 35) 2. Modified Parent/Child Relationships (17, 18, 9e) 3. Visually Based Orientation (4, 5, 6, 55, 60, 64, 70, 78, 3e) 4. Feedback on Speech Efforts (21, 83, 85, 10e) 5. English Appreciation Attributable to Reading (12, 13, 14, 24, 25, 7e, 8e) 6. Siblings, Significant Link to Hearing World (26, 29, 30, 32) 7. Realistic Self-Assessment (19, 22, 23, 40, 43, 12e) 8. Accessible/Inaccessible Worlds (11, 33, 34, 36, 38, 39, 84) 9. Changes During Adolescence (27, 32, 41, 57, 11e, 12e) 10. Affinity with Deaf Peers/Adults (44, 45, 46, 47, 50, 52, 53, 59, 65, 66) 11. ASL, the Pillar of Bilingualism (61, 74, 75, 76, 77) 12. Language Choice, Confidence Linked (79, 81, 86, 87, 90, 13e) 13. Language Suppression, Contradevelopmental (7, 8, 5e) 14. Subjecting to "Didactic" Adults (Parents Included (2, 1e, 2e, 16) 15. Thinking, not Necessarily Language-Dependent (70, 73, 74) 16. Prior Schooling (1e, 5e)	1. Semi-Accessible Hearing World (7, 8, 9, 11) 2. Support System (2, 6) 3. Self-Concept (7, 12) 4. Selective Socialization, Language Related (1, 3, 10) 5. Eventual Bilingualism (11) 6. Language and Cognition (15) 7. Modified Language/ Relationships (4, 13, 14) 8. Empty Feedback (4) 9. Reading Valued (5)	1. The Power of Individuality (3) 2. Communication and Relationships (10) 3. Bilingualism (5) 4. Language and Thinking (6) 5. Schooling (8) 6. Supportive Network (2, 4) 7. Useability of English Skills (3, 9)

(table continues)

Ella's Table 10 Thematic Clustering	Ella's Table 11 Higher Level Themes	Ella's Table 12 Common Themes
1. Restricted Language Environment (4, 15, 27, 49, 1e, 34e) 2. Accessible Language Environment (23, 16e) 3. Language Based Socialization (21, 51, 3e, 4e) 4. Meaning of Language Contextually Dependent (62, 74) 5. Other-Directedness, Power Struggle (11, 15, 23, 41, 9e, 10e, 11e) 6. Meaningful vs. Rote Learning (9, 10, 36, 42, 43, 44, 46) 7. Supportive Parents (5, 19, 22, 34, 53, 21e, 22e) 8. Deaf Mentor (24, 37, 52, 54, 17e, 29e) 9. Self-Concept (20, 25, 28, 31, 32, 48, 24e, 31e) 10. Speech, English (26, 30, 37, 45, 72, 5e) 11. Bilingual Awareness (40, 67, 68, 71, 13e, 32e) 12. Supportive Peers (50, 28e) 13. Deaf Instructors (39, 55, 65, 66, 30e) 14. Additional Bilingualism (69, 33e) 15. Cognition, Imaginal Processing (56, 57, 58, 59, 63, 35e) 16. Didactical Relationships (8, 16, 17, 18, 7e) 17. Individually Recognized in Authentic Relationships (3, 5, 6, 19)	1. Accessible/Inaccessible Worlds (1, 2) 2. Power Struggle; Self-/Other-Directedness (5, 6, 16) 3. Supportive Family (7, 12) 4. Self-Concept (9) 5. Communication and Relationships (3, 17) 6. Language and Cognition (15) 7. English, Written and Spoken (6, 18) 8. Spontaneous Bilingualism (11, 14) 9. Reflections on Prior Schooling (5, 10, 13, 16) 10. Deaf Instructors/Mentors (8, 13) 11. Reading (6)	1. Accessible/Inaccessible Worlds (1) 2. Power/Choice (2, 3, 4) 3. Deaf Adult Mentorship (3) 4. Language/Communication (3, 5) 5. Supportive Network (3) 6. Schooling (2, 7, 11) 7. Bilingualism (8) 8. Language and Thinking (6)

(table continues)

Liz's Table 14 Thematic Clustering	Liz's Table 15 Higher Level Themes	Liz's Table 16 Common Themes
1. Vague Recollection of Language Acquisition (1, 2, 3, 6, 54, 55, 1e) 2. Standardized Family Language (2, 3) 3. Language-Based Socialization (5, 6, 41) 4. Supportive Parents (7, 19, 24, 3e) 5. Sibling Socialization and Support (12, 13, 18, 19) 6. Early Reading, a Favorite Activity (12, 13, 14, 15, 16, 20, 48, 5e, 7e) 7. Easy Transition into First Year School (1, 4, 27, 29, 31, 36, 40, 9e, 10e) 8. English and ASL Separate (6, 30, 4e, 6e, 15e) 9. Contextual Dimension of Language (53) 10. Advantages of Bilingualism (8, 9, 18, 56, 6e, 16e) 11. Bi-/Multilingual Flexibility (17, 23, 28, 46, 8e) 12. Meaningful Language Activities (35, 48, 49, 50, 15e) 13. Language and Cognition (18, 21, 22) 14. Language and Self-Concept (1, 41, 14, 25, 26, 27, 43, 44, 5e, 11e) 15. Changes during Adolescence (11, 34) 16. Appreciation of Language (51) 17. Speech (38)	1. Natural Language Acquisition (1, 2) 2. Support System (4, 5) 3. Self-Directed Language Activities (6, 12) 4. Orientation to Second Language (7) 5. Bilingualism (10, 11) 6. Language and Cognition (13) 7. Self-Concept (14, 15, 16) 8. Socialization (3)	1. Spontaneous Language Acquisition (3) 2. Language and Socialiation (1, 2, 8) 3. Self-Esteem and Learning (7) 4. Spontaneous Bilingualism (4, 5) 5. Language and Thinking (6) 6. Supportive Network (2) 7. Reading Valued (3)

(table continues)

Norma's Table 18 Thematic Clustering	Norma's Table 19 Higher Level Themes	Norma's Table 20 Common Themes
1. Supportive Parents (1) 2. Language Acquisition (3, 4, 5, 19) 3. Bilingualism (4, 6, 8, 16, 17, 22) 4. Language Knwoledge/Use (7, 8, 9. 12, 15) 5. Language and Context (11, 13) 6. Language and Self-Concept (3, 8, 17, 18, 23) 7. Accessible/Inaccessible Worlds (24, 25) 8. Readiness for Learning (4, 6)	1. Language Acquisition/Use (2, 6) 2. Language Awareness Bilingual (4, 7) 3. Supportive Family (1) 4. Language and Cognition (5) 5. Bilingualism (3, 8) 6. Self-Esteem (6)	1. Language Spontaneity/Confidence (1, 2, 6) 2. Attitude toward Languages (1, 5) 3. Bilingualism (5) 4. Communication/ Relationships (3, 4) 5. Language Consciousness (2) 6. Language and Thinking (4)

(table continues)

Ette's Table 22 Thematic Clustering	Ette's Table 23 Higher Level Themes	Ette's Table 24 Common Themes
1. Language Choice (5, 8, 20) 2. Self-Esteem (4, 7, 10, 12, 14) 3. Solid Family Language (1, 2, 6) 4. Bilingual Flexibility (3) 5. Reading (11) 6. Language in Context (13, 20, 23) 7. Language and Cognition (16, 17, 18)	1. Language Autonomy (1) 2. Supportive Family (3) 3. Bilingualism (4, 6) 5. Self-Esteem and Language (2, 3) 6. Language and Cognition (7) 7. English Skills (5)	1. Language Spontaneity/Freedom (1, 7) 2. Self-Esteem (5) 3. Bilingualism (4) 4. Communication/ Relationships (2, 3) 5. Language and Thinking (6)

Note. The numbers in the parentheses represent the preceding themes.

Table 26

E. Tabulation of Fourth Level of Clustered Themes of Deaf Co-Researchers

Fourth Level Themes	Co-Researchers			
	Rosa	Gofer	Ella	Liz
Supportive Network (4.1; 8.2;, 12.5; 16.6)	x	x	x	x
Communication and Relationships (4.8; 8.2; 12.4; 16.2)	x	x	x	x
Limited Access To Hearing World Recognized (4.8; 8.1; 12.1)	x	x	x	
Home/School Language Method Disparity (4.2; 12.6)	x		x	
Oppressive Schooling (4.2; 8.5; 12.6)	x	x	x	
Power/Choice (8.1; 12.2)		x	x	
Second-Language Reading Valued (4.5; 8.7; 12.11; 16.7)	x	x	x	x
Language-Linked Self-Esteem (4.3; 8.1; 12.2; 16.3)	x	x	x	x
Siblings as Mentors (4.1; 4,1 & 8; 8.6)	x	x		
Deaf Adults as Mentors (4.1; 12.3)	x		x	
Meaningful/Relevant Learning (4.5; 8.7; 12.11; 16.7)	x	x	x	x
Spontaneous Bilingualism (4.6; 8.5; 12.7; 16.4)	x	x	x	x
Transitional Experiences with English (4.2; 8.7; 12.6; 16.3)	x	x	x	x
Perceived Language-Independent Thinking (4.7; 8.4; 12.8; 16.6)	x	x	x	x

Note. Common themes in this table are based upon Common Themes in Table 25. Numbers in the parentheses represent the co-researchers' themes in the preceding table. For example, "4" in (4.1) refers to Rosa's Table 4 and the "1" refers to the common theme no. 1 in Rosa's table no. 4.

Table 27

F. Tabulation of Fourth Level of Clustered Themes of Hearing Co-Researchers

Fourth Level Themes	Co-Researchers	
	Norma	Ette
Supportive Network (20.4)	x	x
Language Spontaneity/Confidence (20.1; 24.1)	x	x
Communication/Relationships (20.4; 24.4)	x	x
Attitude Toward Language (20.2; 24.2)	x	x
Spontaneous Bilingualism (20.3; 24.3)	x	x
Perceived Language-Dependent Thinking (20.6; 24.5)	x	x
Home/School Language Method Parity (20.4; 24.4)	x	x
Volitional Second Language Choice (20.2 & 5; 24.1)	x	x
Second-Language Reading Valued (20.3; 24.3)		x
Second Language Transitional Experiences (20,5; 24.3)	x	x

Note. Common themes in this column are based upon the themes in table 25.

Deaf Co-Researchers

1. Supportive Network

All four deaf co-researchers had supportive parents and siblings during their childhood and adolescent years; however, the types of support varied widely. There seem to be four different types of parental support in terms of language and communication relationships as experienced by the co-researchers. The four types are:

a. Actively unconditional parental support: The parents accept the child as s/he is and allow him/her to grow into the family or community network in his/her own way. They expect the child to grow intellectually. They accept and support the child's personal uniqueness. They expect him/her to eventually adopt the family language and communication modality without subjecting him/her to formal lessons. Ella and Liz's parents involved them as significant partners in the family communication network during their preschool years. Ella's parents took her to a Deaf Club and a Deaf Church when she was as young as two years old (9.7). She was exposed to signing adults and started socializing with some of their children. Ella (9.19) discussed her concerns about the speech-emphasized schooling with her parents and knew that they were receptive and sympathetic to her. Liz's parents were apparently proactive in anticipating Liz's need to grow intellectually. They encouraged her and her siblings to read library books (13.7, 13.3e). When Liz was a high school student, her parents took her for a visit to Gallaudet University where she discovered a higher level of communication and socialization among the students (13.24). Ella and Liz's

parents apparently accepted their childrens' deafness and expected them to acquire the family language and function within the family structure naturally. "Actively unconditional" parents tend to have an optimistic attitude towards their children and recognize their individuality.

b. Passively unconditional parental support: Parents accept their child as s/he is and allow him/her to grow within the family structure--somehow. Rosa's parents slowed down their speaking presumably to improve Rosa's chances of lipreading and comprehending their speech (1.1e). Even though she recognized her parents' genuine care for her, she sensed limited communication relationships with them (1.3, 1.35, 1.2e). Rosa recalled that her hearing sibling was her significant communication partner at home (1.4). With the limited communication relationships with her parents, one may infer that her sister also functioned as an important liaison between herself and the other family members. Rosa's experience may be summarized to show that her parents accepted her deafness without realizing that they could have contributed more to their intellectual relationships with her. Rosa did not suffer much loss of opportunity to develop her social skills as she had her sibling at home and peers at the residential school for the deaf where she stayed much of each school year. "Passively unconditional" parents seem to accept a deaf child's individuality without becoming actively involved in his/her in day-to-day activities.

c. Actively conditional parental support: Parents may accept the physical being of their deaf child--conditionally. To them, the child would have been better had s/he appeared less deaf and more like their image of a

normal hearing child. Gofer's father let his acquaintances know that his child was deaf but insisted that the child could talk (5.19). His mother became teacher-like and taught Gofer speech skills (5.2); likewise his father encouraged him to speak (5.16). These instances imply that, as a child, Gofer had learned that he was an incomplete person unless he was able to meet his parents' concept of their child's state of being. Readers may guess that his parents' acceptance of him as a deaf person was conditional. Gofer's parents encouraged him to learn speech skills during his childhood but he chose to learn sign language during his adolescence (5.60). Gofer faced the reality of his limited speech skills during his adolescence. In retrospect, he had thought he would probably have developed his language skills equally well had he started with ASL (5.72). This may be construed to suggest that Gofer's language skills did not really suffer (5.72) as he apparently adopted ASL as a second language with little difficulty. He felt that he could have benefitted more had he been allowed language and communication freedom during his childhood and adolescence. He sensed that he had missed something in those years with the limited access the spoken-language community (5.11e).

Furthermore, actively conditional parents also expect teachers to join forces with them in teaching and encouraging speech. Gofer was sent to a residential school for the oral deaf (5.3). His parents and teachers had some success with Gofer as he could speak with considerable intelligibility and lipread well. But, as an adolescent, Gofer made up his own mind and learned to sign. It was not until he was in his adolescence that he finally

liberated himself from having to measure up to his parents and teachers' expectations. Gofer's experience with learning social values shows that genuine self-directed learning would be more relevant to personal needs than other-directed learning.

d. Passively conditional parental support: The following description is predicated on the basis of the three preceding descriptions. The "passively conditional" parents would accept the physical being of the deaf child but be "resigned to tolerating" his/her deafness. They expect the child to learn and use the family language and communication methods without really involving themselves in promoting their expectation. They would prefer that the deaf child learn the language/communication skills through his/her hearing siblings and peers and formal lessons at school. They may hope that, through the deaf child's interactions with hearing siblings and peers in combination with efforts of speech teachers, the child would eventually become more like their concept of a normal hearing child. The "passively conditional" parents seem to be distant but they retain a control over the child's language and communication development.

2. Sibling Role

The lived-experiences of the deaf co-researchers seem to suggest that there are two classes of siblings: Interactive Siblings and Mentor-Siblings. Interactive Siblings treat their deaf siblings as independent individuals. Mentor-Siblings may start as "the hearing ears" of their deaf siblings in all-hearing school activities; they may act as a liaison person or an interpreter

through whom the deaf persons gain access to hearing people. Hearing siblings may become the deaf siblings' mentors when they are socializing with all hearing peers. Liz, Rosa and Gofer's siblings could be described as Interactive Siblings who were their important play and social co-partners (5.41, 5.42, 13.12). Rosa and Gofer's siblings were familiar with their unique communication methods and styles (1.4, 5.6). Rosa, Ella and Liz's siblings were interactive with them throughout their childhood and adolescence. (Ella and Liz's siblings were deaf and they used sign language). Gofer's siblings also functioned as his liaison person through whom he had some access to his hearing hometown residents (5.41). Gofer's sibling, in essence, had two roles--as a friend and as a mentor. Rosa's sibling functioned as an interactive sibling as well as her mentor during her preschool days (1.4). Rosa's data indicated that her sibling was an important social partner in her family. Because Rosa was the only deaf member of her family and because the rest of her family had limited signing/gesturing skills, one may suspect that Rosa's sibling was also her communication facilitator in her family. This would be construed as a form of mentoring. Sibling involvement in a deaf individual's life is significant, particularly in a family with hearing parents and hearing siblings. It seems that Mentor-Siblings, rather than parents, are perceived as the means through which the deaf experience social, cultural and intellectual integration or segregation within the all-hearing family institution or in the all-hearing community. Interactive Siblings, on the other hand, are perceived more as co-players rather than facilitators in the deaf persons' day-to-day activities. Furthermore siblings also have a role in the deaf persons'

language and communication skill development at least until they discover more meaning in peer relationships at school. Gofer's experience indicated that his being accepted by deaf peers underlied his determination to adopt their language and their method of communication--signing (5.12e).

3. Schooling

a. Rosa's schooling is described as "facilitative-inhibitive". "Facilitative schooling" encourages a student to progress through educational programs at his/her own speed. "Inhibitive schooling", on the other hand, tends to impede a student's progress due to factors like an implementation of certain language and communication methods. Rosa did not recall difficulty in adjusting to her first years of schooling probably because of her positive attitude toward relationships with people. On the other hand, Rosa had trouble understanding the hearing teachers with their inept incorporation of signing into their spoken communication with deaf students (1.12). She also recalled some struggle with use of school-promoted English language skill (writing) until she was older (1.29). These two aspects of her schooling experiences suggested that her schooling had impeded her potential rate of learning. Had she been allowed to progress with her own language or taught by teachers with whom she could enjoy interactive communication, she might have experienced a more satisfying schooling.

b. Gofer's schooling is described as a mixture of facilitative-inhibitive and facilitative-supportive. At the residential school for the oral deaf, the philosophy of communication was consistent with that of Gofer's parents at

home (5.1 & 5.3). Gofer left an oral-emphasized home for an oral-emphasized school. His schooling should be described as facilitative-supportive--to his parents but facilitative-inhibitive to him. Perhaps it was to Gofer's advantage as the school's philosophy of communication was consistent with his parents' wish. His schooling was facilitative-inhibitive rather than facilitative-supportive as implied in his eventual switch to ASL-based socialization during his adolescence. Gofer's curiosity about signing was suppressed (5.4) until he decided to learn it when he was an adolescent (5.44). He sensed that the school-imposed communication interfered with his intellectual growth (5.27). In retrospect, Gofer's preference for signing over speaking during his adolescence leads one to believe that his prior schooling was more inhibitive and oppressive than facilitative and supportive.

c. Ella's early schooling was described as restricted and oppressive. Much of her preschool visually-based language (ASL) and socialization experiences did not seem to count in the classroom. In the classroom, speech lessons were emphasized (9.9, 9.10 & 9.16) and socialization restricted (9.17). That kind of experience contrasted sharply with her preschool experiences at home and in Deaf Community (9.7). Throughout much of her schooling years, Ella was deprived of opportunities to gain access to her teachers with their limited signing skills (an example cited in 9.33). Ella was subjected to one or another form of oppressive schooling. She was not allowed to sign in her first years and then she was required to learn from her teachers with inept signing skills. She was held as a captive student with the teacher who refused to let her sign-talk with classmates but

made her learn basic speech sounds. This is an example of oppressive schooling.

d. Liz's prior schooling is described as facilitative and supportive. Liz was allowed to sign at the school as well as at home. She apparently experienced very little difficulty in adjusting to school life (13.4). There is a hint of oppressive schooling at one point in her experience (13.13e). Her teacher "overlooked" Liz in favor of showing off her classmates' better speech skills in front of visitors. Liz found herself in a precarious position; this may be interpreted to suggest that she also experienced a form of language-related oppression. Until recently Liz did not really realize that ASL was as sophisticated a language as English (13.16e). This may suggest that Liz was conditioned to perceive English as superior to ASL. This also exemplifies a form of oppressive schooling.

All of the four co-researchers have experienced a type of oppressive schooling not typically experienced by hearing children. Hearing students usually keep their same method of communication and language.

4. Accessible/Inaccessible Worlds

In this study, an accessible world is like an unrestricted environment in which a person enjoys meaningful interaction with other persons. On the other hand, an inaccessible world is a kind of environment in which an individual does not have the kind of "free access" hearing counterparts have within the hearing school context. Ella (9.4) did not experience difficulty in gaining access to people at home and in the Deaf Community until she was

in a hearing environment. As a young girl, she faced a social isolation in the hospital ward where she had to stay for awhile. Rosa (1.3) recalled that her parents and siblings seemed to be involved among themselves and that Rosa sensed she was missing something. One of her siblings became her important means of making her home-world a more accessible place. Like Ella's, Rosa's world at her residential school was accessible. Gofer enjoyed access to deaf peers at the oral residential school (5.9); he started experiencing frustrations in maintaining access to hearing peers in his hometown when his peers became adolescents. Gofer felt that there was an invisible barrier that precluded his access to the hearing individuals. Liz seems to have access to people at home and at the residential school from when she was very young (13.55). In a way, Liz's accessible world was similar to those of the hearing co-researchers. Like Liz, the hearing co-researchers had relatively easy access to their family as well as to their classmates and teachers at their schools.

5. Self-Esteem

The self-esteem of the deaf co-researchers, during their adolescence, was affected by others' perceptions of how well deaf persons performed with somebody else's language or method of communication. Rosa (1.7e), Ella (9.29), Gofer (5.83), and Liz (13.38) experienced one or another form of humiliation related to their discovery that their mastery of the school-promoted English skills, like writing and speaking, were not as advanced as they were led to believe. Rosa thought that she was doing great until she discovered

that her writing style was rather mechanistic and simple and that she needed to do more work on it (1.28 & 1.11e). She also discovered that her speech skills were inadequate and abandoned her vocalization (1.7e). Gofer enjoyed successes with his speech skills until he tried them out with strangers. He soon discovered more confidence with his newly acquired signing skills than with the speaking skills that he had been working hard to master for years (5.71 & 5.81). Liz never had to "overhaul" her communication method skills. She had some stressful moments when she was "by-passed" by her teacher who preferred certain students with better speech skills (1.38).

I, as the principal researcher, had not asked the deaf co-researchers to describe what it was like when they discovered that their writing, reading or speaking were not as good as they were led to believe.

Hearing readers may reflect upon their experiences and find it difficult to imagine how the deaf adolescents' frustrations affected their self-esteem. Deaf readers are likely to recall such frustrations. Deaf adolescents' self-esteem is more susceptible to others' opinions on how well they perform with English skills than hearing adolescents.

6. Meaningful Language-Related Learning

The experiences of the deaf co-researchers indicate that reading is definitely a satisfying way of gaining mastery of the English language. Gofer (5.24, 5.25 & 5.7e) and Liz (13.20 & 13.21) have good feelings associated with their comic-book reading during their childhood and adolescence. Ella (9.32) noticed that she had already acquired good reading skills while she

was a student at the residential school for the deaf. Rosa (1.15) recalled the good feelings associated with her successful reading of challenging books during her school days. Their experiences seem to suggest that reading involves cognitive processes rather than a linguistic processes as they described their imaginal involvement in book stories. Liz explained her experience of having read a thick book in one night and told the story to her siblings in ASL. This feat implies that she had "internalized" the story so well that the essences of the story could be retold in a completely different language. Cognitive processes involve transformation of messages in printed English into some form of supralanguage (Carey, 1987) which permits explication of the message in a completely different language. Their experiences may be reflected upon and interpreted to suggest that reading is a dependable way to gain mastery of English language. To the deaf co-researchers, silent reading skill seems to be the most easily acquired of all the English language skills like writing, speaking, and lipreading. Since reading, thinking and bilingual switching seem to be interrelated as the deaf-co-researchers perceived that none of the processes require use of word- or sign-symbolic language. One may infer that these processes are essentially language-independent.

7. Home/School Language Method Disparity

Ella signed with her family members at home and with the deaf adults at Deaf Club and Deaf Church. She was not allowed to sign with peers in the classroom in her first year at school (9.16-17). She was required to

lipread and speak. When she was with her peers outside the classroom or back at home, she resumed signing. There was no consistency in language method in the classroom and outside the classroom. How much effect this method disparity had on her education might never be properly assessed. Ella was fortunate to be able to associate with signing peers and family members as well as with deaf adult models. Rosa struggled through her schooling years in the classroom, but was fortunate to have deaf peers and deaf adults to sign-talk with outside the classroom at the residential school and as well as using gestures with her sibling at home.

8. Deaf-Adult Mentorship/Role Model

The experiences of Rosa and Ella indicated that deaf adults had supported their efforts to obtain education and to learn and use English language skills. Rosa noticed that Mr. D.A. Model III had excellent signing skills which could be used to enhance her appreciation of printed English (1.17). Mrs. D.A. Model (1.33) had good command of English herself. Ella had Mr. D.A. Model as the only deaf person among staff members at the residential school for the deaf. Furthermore, he was the only one with excellent signing skills (9.24). Incidentally she approached this deaf adult for any kind of help when she had trouble with classroom lessons taught by her teachers who could not sign. Gofer was attracted to a deaf adult when he was in late adolescence; he successfully sought out and became acquainted with this (5.51).

Rosa, Ella, and Gofer's inclination to approach deaf adults demonstrated their need to identify with and enjoy meaningful relationships

with deaf adults who shared their language and cultural experiences. Liz, as a deaf persons, did not mention a strong attraction to any particular deaf adult during her adolescence. Rosa, Gofer and Ella did not have as many deaf adults to approach at school as Liz apparently had. Liz had deaf parents, deaf relatives and deaf staff members at the residential school. Having a deaf adult role model seems to have had less impact on her. The "lighthouse beacon effect" of a deaf adult role model seems to be more evident in schools where most of the other staff members do not relate to the visually-based experiences of the deaf students very well. There is nothing mystical about the phenomenon of deaf adult mentorship or role models. The instances of deaf students getting more satisfaction from schooling through help of deaf adult role models implies that the students could become more productive in the classroom.

9. Bilingualism

Bilingualism is acquired through natural interactions within the same-language community. The process of bilingualism is never taught at school. It is more like an art than a science. It simply emerges as one of the most remarkable and simple human phenomena; yet it is not understood enough to be incorporated into the curriculum. Educators teach second languages but leave the process of switching between languages to the students. I believe that, once the phenomenon of acquiring and using bilingualism is better understood, relationships between an explicit language and cognitive processes would be better understood. Rosa (1.20) switched from English at school to ASL with peers outside the classroom or sibling language with her

sister at home and then back to English in the classroom. Gofer was trained to stick with oral English for years but, as an adult, he learned ASL and experienced very little difficulty, if any, in switching between ASL and English (5.75). Ella (9.67 & 9.68) used ASL with her family and "suspended" it to satisfy her teachers' efforts to teach her English skills at school. She switched back to ASL at home. She understood her peers with their gestural language and taught them ASL signs and grammar rules (9.20). Liz started with ASL at home and enjoyed successes with her written English at school (13.48). All of them had experiences with two or even more different languages as well as two or more different language modalities. All of them have switched between languages or modalities without even being aware of their remarkable bilingual skills. Ella, for example, admitted she did not realize that she had been bilingually experienced since her first year in school.

10. Language-Independent Thinking

Rosa, Gofer, Ella and Liz seemed to share a common perspective that thinking was not necessarily English- or ASL-dependent; words and signs were not generally perceptible in their thinking processes. They did not "notice" them in their dreams. Rosa though there was some form of speech going on between her dream characters (1.21) but she thought that neither ASL signs nor English words were perceptible in her thinking (1.24). Ella (9.59 & 9.60) explained that her thinking processes involved transformations into pictures or actions as a prerequisite for comprehension of information perceived in spoken or signed medium. She said she thought in English

when she was writing in English but she visualized actions when she was reading novels (printed in English). Liz (13.18) described her reading experiences. She could read a whole novel and discuss parts of the story without being conscious of words or signs in her thinking. Rosa (1.15) described her experiences of becoming "personally" involved in novels. Gofer had described his thinking process as efficient and word-less. The deaf co-researchers' perceived their thinking as language-independent in essence.

11. Transitional Experiences with English

Rosa, Gofer and Ella went through a transitional phase in which they experienced some struggle to get meaning out of English. When they were in their adolescence, they realized that their written English style was too simple and rigid. They had to work hard in order to use them properly. Although they though that their early school lessons which consisted of English grammar and that sample rote learning was a good way to learn English, Rosa and Ella discovered that their writing skills were of limited use. They had to liberate themselves from the disabling effects of rigid syntactical structuralism which seemed to preclude them from expressing themselves freely in written English. It took them a long time before they felt comfortable with the skills. All of them knew that English language was important; this could be because they were taught that English, not a sign language, was the desirable language.

While they were struggling with English, they also began to realize and appreciate that a sign language was a true language. The kind of language struggle was not experienced by the hearing co-researchers. Unlike the deaf

co-researchers, the hearing counterparts chose to study and use their second language with an opportunity to use their first languages. Unlike the deaf co-researchers, they were not subjected to oppression of their language and cultural values.

It was interesting to note how the hearing co-researchers, Norma and Ette, adopted ASL and English respectively as their second languages as compared to how Rosa, Ella and Gofer adopted English as their second language. It seems appropriate to conclude that children with freedom to use their own language tend to acquire and use a subsequent language more readily and naturally (Liz 13.54; Norma 17.3 & 5, & Ette 21.17-18) than those who are required to forego their own language and learn a new one (Rosa 1.29, & Ella 9.37, 49, & 74). As the children become older, those with more language restrictions and controls seem to require more time to adopt the new language than the others who learn a new language through natural social interactions. Ella, Rosa and Gofer's struggle to incorporate English skills seemed to be longer and more intense as compared with Norma And Ette's experience of adopting their second language.

Hearing Co-Researchers

1. Supportive Network and Language/Communication

Like the deaf co-researchers, the hearing co-researchers recalled having supportive parents with a significant difference; the difference is noted in the area of language and communication. The hearing co-researchers' parents expected them to become involved using the family language and communication method. There was no evidence in the hearing co-

researchers' data to show that they, as young children, had to modify their language/communication methods. Their parents seemed to be less anxious about how their children acquired and used communication methods. One may infer that they were confident that their children would find their own way within their families.

2. Attitude Toward Language and Language Choice

The hearing co-researchers' data show that language came to them so naturally that it did not seem to be something for them to be conscious of. They simply used it. As for choice of language, they simply adopted the family language. As they became older, they chose to study a second language. Norma chose ASL when she was in her adulthood and has been enjoying it ever since. Ette started studying in an English immersion program in her fourth grade. As an adult she chose to stay with English for her professional pursuits and spoke French with her family members occasionally. One may infer that how the adult proceeds in acquiring a second language may be related to how s/he acquired her/his first language during her/his childhood. One may hypothesize that a child, who enjoys using a language, will likely enjoy learning a second language in later years.

3. Natural Bilingualism

Norma and Ette's data show that they experienced some anxiety associated with language only while they were in the process of learning a second language. Norma recalled the sensation of being judged by native ASL users who seemed to be watching how she signed. As she became

more fluent with it, she seemed to be losing that second-language related consciousness. Ette experienced her learning of English in a similar way. Both Norma and Ette enjoyed switching between English and ASL (for Norma) and French and English (for Ette) during their adulthood. This implies that they have been switching between languages spontaneously.

4. Language and Thinking

Norma preformed words in her thinking especially when she needed to be careful with what she was going to say (17.14). She also perceived that she visualized words in her thoughts (17.11). Ette thought with English in English-speaking community and with French in French-speaking community, but Ette also mentioned her perception of wordless dreams (21.27). These instances suggest that the words have a necessary role in her thinking processes; however there was evidence to suggest that their thinking did not depend on the words of their first languages. Their bilingual flexibility and versatility imply that their thinking is not necessarily first-language dependent.

5. Reading

As a young child Norma's parents encouraged her to read and make use of reference materials. She attributed her love her reading during her adulthood to her parents who were also avid readers themselves. Ette also mentioned her love for reading; she enjoyed reading English-printed materials. Based upon Norma and Ette's experiences, reading is a highly recommended learning activity. Reading seems to be extremely reliable way to support the person's acquisition of a second language. Furthermore, both

Ette and Norma enjoyed reading which was construed to suggest that reading is harmonious with cognitive processes.

I. Discussion

Language acquisition through meaningful interactions with other individuals is definitely a natural process. A language may be formally taught in the classroom but its effectiveness may be illusory. The student may have acquired a "pseudo-language" which may never replace the language s/he has acquired through social interactions. In following this line of thinking, schooling may not become efficient and relevant unless it incorporates the student's functional social language.

Acquisition of bilingualism is a natural process. There are many bilingual schools where students learn second languages. Typically they learn a second language in an immersion program. In some other programs, they may learn to translate from one language to another. There is no known educational program where underlying principles of bilingualism are taught to students. In other words, there seems to be no attempt to teach the science of bilingualism. No one seems to be able to understand cognitive aspects of bilingualism. Bilinguals know that they could use one or the other language, but they do not seem to understand and explain the underlying processes of switching between languages and their inherent bilingual versatility and flexibility. Bilingualism is acquired in concurrence with acquisition and use of a subsequent language. Whether a person is bilingually competent or not, according to certain criteria, is not as significant as the fact that s/he becomes bilingually flexible and versatile when s/he is allowed access to

resources (mainly people) in either language community. All of the co-researchers (both deaf and hearing) became bilingually experienced as adults.

The instances of becoming lingually flexible with a capacity to handle more than one language disputes any suggestion that human beings' thinking and consciousness are dependent upon any one particular societal language. After having gained sufficient experience with a second language, the user does not stumble when s/he is in the process of switching between the languages. There is a need to distinguish a second-language learning performance from a second-language using performance. The co-researchers' experiences show that they did not have as much confidence with the second language while they were in the process of learning it as they had after they had gained sufficient confidence in using it.

There are instances which suggest a need to review how the second language is introduced to school-age children. On the basis of the deaf co-researchers' experiences, one may believe that deaf and hearing school-age children are required to learn languages in significantly different ways. Deaf children seem to have to struggle with hearing adult-imposed language learning strategies. Hearing children seem to be subjected to more natural second language learning strategies.

The differences in how deaf and hearing co-researchers perceived the role of language in their thinking suggest that relationships between language and thought need to be investigated carefully. Do people really need words or signs to think with? Are hearing people so accustomed to their spoken language that they develop an illusion that thinking is language dependent?

If there is no evidence to suggest that thinking is language dependent, should there be a justification for educators to expect the deaf to learn a language based upon the hearing perspectives of how language should be acquired?

V. Educational Implications

A. Goals of Education

In Canada, each province has its own department of education. Each of the departments is assumed to have its own list of goals for education of school-age children. The Department of Education of Alberta has a list of goals for education of school-age children (Appendix F).

The goals imply that education involves much more than the students' formal learning activities in the classroom. The intention of these goals is to emphasize a wholistic education approach, rather than an education with a series of specified learning activities. This way, the children in the classrooms are treated as dynamic human beings first. As long as educators keep the goals in mind and the children are allowed to go through their stages of development with confidence, the educators may be considered as proponents of the goals. Humans are predisposed to take care of their school-age children and help them grow and become adults. The children are expected to acquire and use a language through meaningful interactions with other individuals in an environment that fosters the growth of their personalities. Such goals for education are applicable in any school regardless of language and cultural differences. These goals are also applicable in deaf programs including those that allow ASL in the classrooms. Communication is essential to educator/student relationships through which the educator and student may experience reciprocal teaching and learning. In order for them to communicate with each other, they need a common

language that has to be functional in "here-and-now" situations. The educator and student must be able to feel comfortable with the common language in order to foster the latter's learning in the classroom. The types of language learning experiences of Rosa (1.12), Gofer (5.21), Ella (9.26), and Liz (13.44) indicate that their educators were more interested in the students as language processors than as whole persons. Meaningful interactions between educators and students improve the likelihood of students enjoying meaningful relationships with adults through which they exchange thoughts, ideas, experiences and feelings. Until this type of intersection occurs, schooling may remain irrelevant to the students (Rosa 1, 29, & Ella 9, 10). The educators still need to revise their methods of teaching deaf students until there is a kind of educator-deaf student relationship that is similar to hearing educator-deaf student relationship in term of quality reciprocal communication.

Ella was placed with "slow learners" because of her poor speech skills, even though her signing skills were superior. In this scenario, the classroom teacher neglected the student's ability and her need to enjoy meaningful and challenging classroom activities (Ella, 9.31). This type of adult intervention would be inconsistent with the basic goals for education of children as it interferes with intellectual growth.

Like hearing school-age children, deaf counterparts need to be able to use a common language with their peers in an unrestrictive environment. They need to grow socially, emotionally and intellectually with peers. Rosa,

Gofer, Ella and Liz enjoyed their peer relationships at their residential schools for the deaf. They also need professionals who can and do understand their deafness and use a language or a communication method which the deaf children prefer to use. The childrens' deafness cannot be used to absolve the educators from their obligation to support the childrens' need to develop as humans.

B. The Lifeworld of a Language User

Meaningful interactions between any two or more humans require "here-and-now" functional communication and language. Deaf adult mentors were important to Ella (9.24) and Rosa (1.13, & 1.33) during their prior schooling. As young deaf students, they were attracted to the deaf adults probably because they shared the common language and sensory-based experiential background. This type of deaf student/deaf adult interaction inspired the following questions: 1. Should educators be required to have acquired a sign language like ASL before they work with deaf children? 2. Should educators who have not acquired sign language be required to learn and use it in a bilingual education approach?; 3. Should the deaf children be required to de-emphasize use of their sign/gestural language and start learning fundamentals of English? As a general rule, deaf children are expected to adopt the values and language of a hearing-dominated society. The 1880 Milan Congress resolved that the deaf had to learn the communication methods of the hearing (Pritchard, 1963); and Appendix D). That resolution, in effect, absolved the educators of their responsibility of

having to learn the sign language of the deaf and confirmed that it was the responsibility of the deaf to learn the spoken language.

The low level of academic achievement of deaf school-age students (Allen, 1986) is inconsistent with the average intelligence of deaf students (Furth, 1966a). It is also inconsistent with the phenomenon of deaf bilingualism as manifested in their ability to switch between school-promoted English and a sign language like ASL outside the classroom. The phenomenon of spontaneous bilingualism of the deaf clearly indicates their potential language and communication versatility and flexibility as discussed in chapter four of this thesis. As school-age individuals, they have experienced switching from English and speech in the classroom to ASL or sibling language outside the classroom. This study shows that Rosa (1.28), Gofer (5.13e), Ella (9.68) and Liz (13.6e) tended to switch between ASL and English with greater confidence during their adulthood. This same confidence was noticed in the hearing co-researchers' data (Ette, 21.17; Norma, 17.16). Their adulthood confidence with two different languages suggests a need to gain an insight into the phenomenon of acquiring and using bilingualism. Traditional teaching emphasizes mastery of English language skills with no apparent emphasis on how the learners could develop their bilingual skills. In deaf education, the sign language is being downplayed or de-emphasized in favor of a mechanical teaching of spoken language skills (Ella, 3.10). There could be more emphasis on giving school-age children an early headstart with experience in bilingual education than the traditional emphasis on immersion in prescribed-language programs. This ability to

switch between languages could be encouraged during the school years. The tendency of young deaf individuals to switch from school language may be construed as indicating that there is a need to review the language curriculum. How deaf schools present their language programs seems to be incompatible with the phenomenon of acquiring and using bilingualism including ASL and English.

C. Principles of Relevant Education

Johnson, Liddell, and Erting (1989) proposed twelve principles for education of the deaf (see chapter one of this dissertation). These principles imply that educators should not persist with their narrow views on how the deaf should be educated. They should not use the "minority" rule. They should not continue with the traditional practice of discouraging the deaf from signing and restricting them to the narrow aspects of education. They must involve deaf children's parents in exploring the best possible ways in which deaf children can pursue educational goals such as those established by Alberta Education.

D. Integration of Lifeworld Experiences and Bilingual Theories

The present phenomenological research suggests that a bilingual educational approach is realistic and reasonable. The experiences of both deaf and hearing bilinguals indicate a human predisposition toward acquisition of a functional language with the capacity for acquisition of one or more subsequent languages. Their experiences of bilingualism are backed with the

following theories.

The affective filter hypothesis proposed by Krashen (1982) includes personal attributes as variables in second language acquisition. Lutke-Stahlman (1986) listed motivation, anxiety, self-esteem and self-confidence as essential variables that determine the quality of bilingual experiences. The affective filter hypothesis implies that people at home and school and in the community need to become involved with deaf individuals as "co-human" beings in order for the deaf to appreciate their role within the social context. In other words, the exercises of being taught social and language skills remain meaningless until the deaf children incorporate the skills into their real relationships with the adults. To Rosa (1.13), Gofer (5.51) and Ella (9.24), the deaf-adult mentors apparently became more meaningful than the hearing adults in the schools for the deaf. This could be due to a communication barrier between the hearing adults and the deaf students or to the deaf individuals' similar understanding of deafness.

The experiences of Ella (9.68), Liz (13.3), Norma (17.1) and Ette (21.2) seem to support the threshold theory (Cummins, 1977; 1978) that suggests that acquisition of a functional first language is essential for acquisition of a second language. All of them found their bilingual experiences beneficial. The deaf and hearing co-researchers' experiences show that ASL, French or English as a first language functions the same way in terms of facilitating a second language. This implies that a bilingual school is a viable concept and that ASL should be permitted or even encouraged in educational programs of or for the deaf.

The additive theory (Lambert, 1975) explains that a second language poses no threat to the first language in a facilitative environment. Ella and Liz had deaf family members and lived with deaf peers in residential schools. They did not seem to suffer language deficiency even though they attended English-based classes. Their experiences substantiated the additive theory as they had been successful with university studies.

Proponents of the subtractive theory may infer that deaf children with budding ASL skills have a form of language development delay at the school where sign language is discouraged. There may be some truth in this as deaf children might have advanced as much as hearing counterparts had they been allowed to use their own language throughout their schooling life. Hypothetically, the subtractive theory should be supported with Rosa's experiences. Rosa started with a relatively undefined language structure with her siblings at home and started with the very basic fundamentals of English in her first years of schooling. However, as an adult, Rosa enjoys handling both ASL and English! As a child, Rosa lived with sign language-users at the residential school. In reflecting upon Ella and Rosa's experiences, I suspect that the additive factors overcame subtractive factors and that bilingualism has roots in the sociocultural rather than linguistic process.

My phenomenological research finding supports the interdependence theory (Lambert & Tucker, 1972 cited in Quigley & Paul, 1984) with instances of Rosa, Ella, and Liz's experiences of enjoying reading English-printed materials even though their basic sociocultural language is ASL. Their two-language interdependence was not studied and proven but implied. The

apparent bilingual flexibility and versatility of all the deaf and hearing co-researchers supports the code-switching theory (Kluwin, 1982) as well as the cognitive dominance hypothesis (Quigley & Paul, 1984). This shows that humans with adequate bilingual skills are predisposed to adjust to accommodate others who have more limited language skills.

Einstein (Ghislein, 1955) and Furth (1966) claimed that thinking is essentially symbolic language independent. This claim is supported with the data-based experience of this study. Rosa (1.21), Ella (9.59), and Liz (13.18) indicated that they did not seem to perceive the role of words or signs in their thinking. The deaf co-researchers have indicated that they have been switching between the English language stressed in the classroom and ASL or another language in their socialization with their peers (Rosa, 1.6; Gofer, 5.12e; Ella, 9.20; Liz, 13.18). As adults, they enjoy using either English or ASL as well as ASL/English blends without realizing that they have been versatile with the two languages. Their language switching experiences support the code-switching theory (Kluwin, 1982). This language-switching flexibility suggests that thinking is not dependent upon any one particular language. The deaf co-researchers thought that neither ASL signs or English words have been "present" in their thinking.

On the other hand, Norma, as a hearing English/ASL co-researcher, seemed to link her thinking with words (Norma, 17.11, & 17.14). She also perceived spontaneity in her switching between her English and ASL in various interactions with deaf ASL users and hearing English users. She seemed to be unaware of her bilingualism (Norma, 17.16) after having

become comfortable with ASL as her second language. Ette, as a French/English bilingual, recalled being self-conscious with English as her new language (Ette, 21.10). However, as she became older and more experienced with her ESL--English as a second language--her bilingual skills seemed to have become so natural that she could see either English or French even in her thinking (Ette, 21.15 & 21.17). Both Norma and Ette were conscious of new languages during the learning phase. They seemed to be able to use either first or second languages in their thinking. The experiences--or perceptions--of the hearing co-researchers suggested that they could switch between languages at will. This may be construed to suggest that they have become so lingually competent that they use rather than depend upon a symbolic language to think with. In other words, cognitive processes are not language-dependent and thought proceeds on its own. This is consistent with the kind of word-independent thinking of Einstein and the deaf Co-researchers (Rosa, Gofer, Ella and Liz).

Educators must free themselves from the traditional methods of teaching the deaf and explore new areas of learning. Training programs for teachers of the deaf certainly need reconsideration.

I propose a symbolic language-independent thinking hypothesis. This hypothesis describes thinking and learning as cognitive processes that incorporate, but are not limited to, the powers of any one symbolic language. This means that human thinking functions with or without any particular language like English, ASL or any others. Proponents of this language-independent thinking hypothesis believe that humans adapt to meet the

communication and language needs of others. Both competent deaf and hearing language users seek to adjust to the uniqueness of others' language users seek to adjust to the uniqueness of others' language and communication methods. Competent language users do not have to think in either language in order to adapt to the others' needs. Mathematicians and chess players think through problems without relying on word- or sign-based languages. This hypothesis encourages the hearing to incorporate the rich visually-based language of the deaf into curricular activities. It de-emphasizes deafness as a pathological or clinical condition and emphasizes it in a different sensory-based context. Adherents of this hypothesis would insist that a spoken language is as good for the hearing people as a signed language is good for the deaf and that either language is really a "tool", rather than a basis of thought. A language is not supposed to interfere with the users' thinking processes. People should be able to use a language to meet their needs a interdependent beings in the world.

This bilingual (or multilingual) educational approach permits deaf individuals to be themselves.

E. Conclusion

Although the deaf and hearing co-researchers in this study were bilingually competent enough to use either language to communicate with people, their experience-based data did not yield enough information to enable me to concretize and describe processes of acquiring and using bilingualism--in terms of linguistics. It was possible for me to gain enough

insight to suggest that the phenomenon of acquiring and using bilingualism is closely related to the phenomenon of communication and interaction with people as well as to cognitive processes.

Knowledge of the linguistics of one or more languages seems to be insignificant as compared with a need to gain an insight into the communication method and language involved in the dynamics of childhood and adolescent interaction and socialization. Rosa and Gofer had hearing siblings at home and deaf peers at their residential schools for the deaf. Ella and Liz had deaf siblings at home and deaf peers at school. Rosa and Gofer's interaction with their hearing siblings occurred in their own communication method or "peer-language". Ella and Liz used a standardized sign language. The four of them were required to learn English in their classrooms. (English did not seem to become their useful or useable social language until they were adolescents or adults.) Outside the classroom, Rosa, Ella and Liz switched back to a language and method of communication that were different from those encouraged in the classroom. Gofer's experience was somewhat different. He was encouraged to use the same school-promoted method of communication with his siblings and peers until he reached young adulthood when he started to learn sign language--from peers. The experience-based data of Rosa, Gofer, Ella and Liz show that peer influence on acquisition of a language and a communication method was significant and probably more efficient than influence from their educators. The present data in this study shows that choice of language and communication method is related to the sensory characteristics of the

individuals. One may conclude that those with limited hearing abilities tend to acquire visually-based means of communication. Educators should give consideration to utilizing deaf students' socializing and language tendencies for sociopedagogical purposes.

There is evidence in this study which suggests that the monolingual second-language immersion program, that is effectively for hearing students like Norma and Ette, may not be as effective for deaf students like Rosa, Ella and Gofer. The latter seemed to struggle more in this type of program than the former. Ette experienced a temporary setback in the early stages of her English-only immersion program while adjusting to the level of native-English speakers. Like Norma, she did not resist or struggle with orientation to a new language the way Ella, Rosa and Gofer did. Ette became involved in an English program as a young girl. Norma was fully prepared to learn ASL as an adult. Liz still could sign at school even though she was immersed in orientation to a new language (English) in her first years at school. The experiences of Liz (ASL-English), Ette (French-English) and Norma (English-ASL) may be used as examples to show that individuals with a social language, that is recognized and respected by educators, are likely to be better prepared for acquisition to a second language.

A conclusion is being formulated on the basis of the above observation is that educators need to become sensitive to the students' own background language and communication experiences and should incorporate them, as an integral sociolinguistic aspect of the curriculum, into their educational programs.

Furthermore, educators need to be more proactive in their thinking. The data in this study show that deaf students tend to switch from school-imposed language and communication methods to peer language and communication methods. All of the six co-researchers had very different experiences related to acquiring and using first and second languages; each of them became confident with two different languages. None of them was formally taught the art or science of switching between first and second language or thinking with either language. They simply began switching between their two languages as early as the first year when they started learning the fundamentals of a second language. By being proactive, educators could improve the efficiency of education through encouraging students to become more lingually (or bilingually) experienced and competent while they are at school. Educators might start looking at a bilingual educational program which is designed to permit the student to learn English as a second language without degrading or de-emphasing their sign language skills.

Educators should also have a second look at how a language is acquired and how it is related to thinking. As indicated in the deaf co-researchers' data, there is a need to gain a better insight into the role of language in cognitive processes. The apparently language-independent cognitive processes as described by the deaf co-researchers deserves further investigation.

Until researchers and educators have a better understanding of the processes of deaf students' acquiring and using bilingualism, the efficiency of

a prudent monolingual educational approach remains inferior to the benefits derived from social communication and language enjoyed by deaf students among their peers. Until educators are able to communicate fluently with deaf students, benefits of their didactic strategies may remain inconsistent with the phenomenon of the students' becoming lingually flexible and versatile as well as the phenomenon of deaf bilingualism or multilingualism.

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VI. Appendix A

Original copy quoted from a local newspaper:

"Wounded hunter Frank Fallows has put away his rifle after being mistaken for a bear by another hunter. The 26-year old Grand Centre man said a rifle shot through the arm has all but convinced him to never return to the wilds. I don't think I 'll ever hunt again," he said from his room at the Royal Alexander Hospital yesterday. Fallows escaped death when a 7-mm bullet from a high-powered rifle tore through his upper right arm as he stood in a field near Grand Centre Monday evening.

RCMP said that it was the second time in six weeks an Alberta hunter was shot by another hunter.

Grand Centre is 293 km northeast of Edmonton".

1. Translated from printed English through signed ASL to written English:

"A 26-year old hunter, Fred Farlows announced that he would surrender all of his rifles because he had been mistaken for a bear. He was badly wounded by a powerful 7mm rifle whose bullet penetrated his forearm. The incident occurred in Grand Prairie Centre, 293 km north of Edmonton.

In his room at the Royal Alexandra Hospital, he made a statement that he would never return to the wilderness.

RCMP reported that it was the second hunting mishap in 6 weeks".

2. Translated from printed English through "home-made" gestural language to written English:

"A man said he wouldn't hunt anymore. He said the reason for not hunting anymore was that at one time someone mistook him as a bear and shot him.

He was 26 years old when that happened.

When he was in the hospital, he said he would never hunt again. He almost died because the rifle was powerful. It had 6 bullets. One of the bullets hit his right arm.

The hunting accident occurred about 293 km northwest of Alberta (Edmonton).

The Forest Ranger or RCMP said it was the second time such accident happened in 6 weeks in Alberta alone."

3. Translated from printed English through spoken English to written English:

"A 27 yr old Frank Fallows, from Grand Centre, north of Ed, was hunting. He was shot in the right arm with a high powered rifle, with a 7 mm bullet. He was mistaken for a bear. He was interviewed while in the hospital - Royal Alex and indicated he would not be hunting again.

This is the second similar incident to happen in recent weeks."

VII. Appendix B

Kannapell (1985) lists the following types of bilingualism:

1. ASL monolinguals: Deaf people who feel comfortable expressing themselves only in ASL and understanding ASL. They have minimum skills in English.

2. ASL-dominant bilinguals: Deaf people who feel more comfortable expressing themselves in ASL than in English and are able to understand ASL better than English (either in the form of printed English or signed English). In other words, English is their second language.

3. Balanced bilinguals: Deaf people who are comfortable expressing themselves in both ASL and English and are able to understand ASL and English equally well.

4. English-dominant bilinguals: Deaf people who are comfortable expressing themselves in English and are able to understand English (in printed English or signed English) better than ASL. In other words, ASL is their second language.

5. English monolinguals: Deaf people who are comfortable expressing themselves only in English (in the form of written, oral or signed English) and understand English (in the form of printed, oral or signed English). They have minimal skills in ASL.

6. Semi-linguals: Deaf people who have some skills in both English and ASL, but have not mastered either of the two languages fully.

7. English-dominant bilinguals and/or English monolinguals are usually those who became deafened or hard of hearing after acquiring English as their first language. They usually maintain their speech skills throughout their lives and learn ASL as a second language.

VIII. Appendix C

University of Alberta Educational Psychology Ethical Guidelines

Guidelines 1: If research procedures potentially produce physical or mental harm for the participant, the investigator must assess the magnitude and present justification for it to an appropriate ethics committee. Before approving the research, the committee must be satisfied that there is a reasonable expectation that he results will significantly increase understanding or will benefit human health and/or welfare. As the magnitude of the potential risk increases, the benefits must disproportionately increase. (Safeguarding participants)

Guideline 2: Participants must be fully informed and voluntarily consent to participation. (Safeguarding Participants)

Guideline 3: participants must be guaranteed anonymity and their responses treated with confidentiality. (Safeguarding Participant)

Guideline 4: Prior to undertaking a research or instructional project, the investigator must be sufficiently knowledgeable about relevant literature, procedures, risk and possible uses to which the results may be put in order to make responsible decisions. When in doubt about the application of the guidelines, the investigator is encouraged to consult with informed colleagues and supervisors. (Role of Investigator)

Guideline 5: The investigator must insure that all individuals under his or her supervision have the training and competence needed to carry out their responsibilities. (Role of Investigator)

All proposed research involving human participants must be reviewed by an ethics committee. Proposals for specific research studies (even if unfunded and including research conducted by students) and grant or contract applications must be reviewed by a Department Committee (or a Faculty Review Committee in nondepartmentalized Faculties). Grant proposals must be reviewed by a Faculty General Policy Committee on Human Research for individuals whose appointment is not within any Faculty.

IX. Appendix D

The International Congress on the Deaf and Dumb held at Milan in Italy in 1880 passed the following resolution:

> This Congress considering the incontestable superiority of speech over signs in restoring the deaf-mute to society, and in giving him a more perfect knowledge of the language, declares that the oral method ought to be preferred to that of signs for the education and instruction of the deaf and dumb ... and considering that the simultaneous use of speech and signs has the disadvantage of injuring speech, lipreading, and precision of ideas, declares that the pure oral method ought to be preferred ... and considering that a great number of the deaf and dumb are not receiving the benefit of instruction recommends that Governments should take the necessary steps that all the deaf and dumb be educated. (Pritchard, 1963 p. 92).

X. Appendix E

Deaf students exhibit numerous problems in their attempts to express themselves in our language.:

1. "verb errors - wrong tense, inconsistency of tense, verb choice errors, wrong form of the very, confusion of be and have, subject/verb agreement, omission of auxiliaries,
2. confusion of singular and plural nouns,
3. ungrammatical strings of adjectives,
4. absence of adverbs,
5. omission, or misuse of pronouns,
6. repetition of nouns, rather than use of pronouns,
7. wrong function of words,
8. idiom errors,
9. article misuse or omission,
10. wrong word choice,
11. short, choppy, monotonous sentences,
12. garbled sentences, and
13. incorrect word choice.
14. errors in 'conceptualization', that is, even if grammatical, what they say is not what native speakers would have uttered in similar circumstances. In other words, the concept expressed is foreign to English" (p.8).

(Reference: Goldberg, J.P., Ford, C.K., & Silverman, A. (1984). "Deaf Students in ESL Composition Classes: Challenges and Strategies". Teaching English to Deaf and Second-Language Students. Vol. 2. No. 2.